CHEMICAL MARKETS

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Chemical Process Industries

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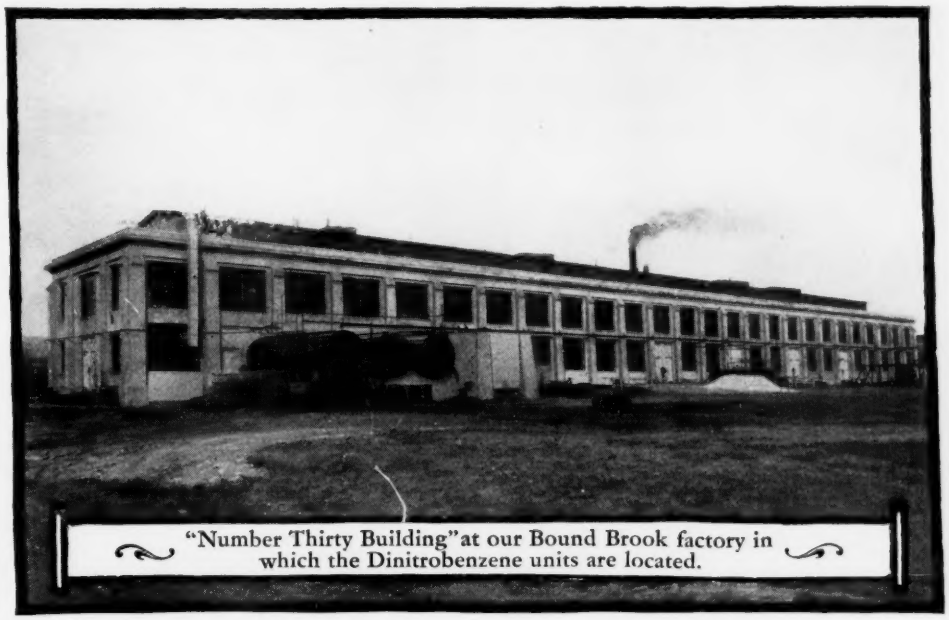

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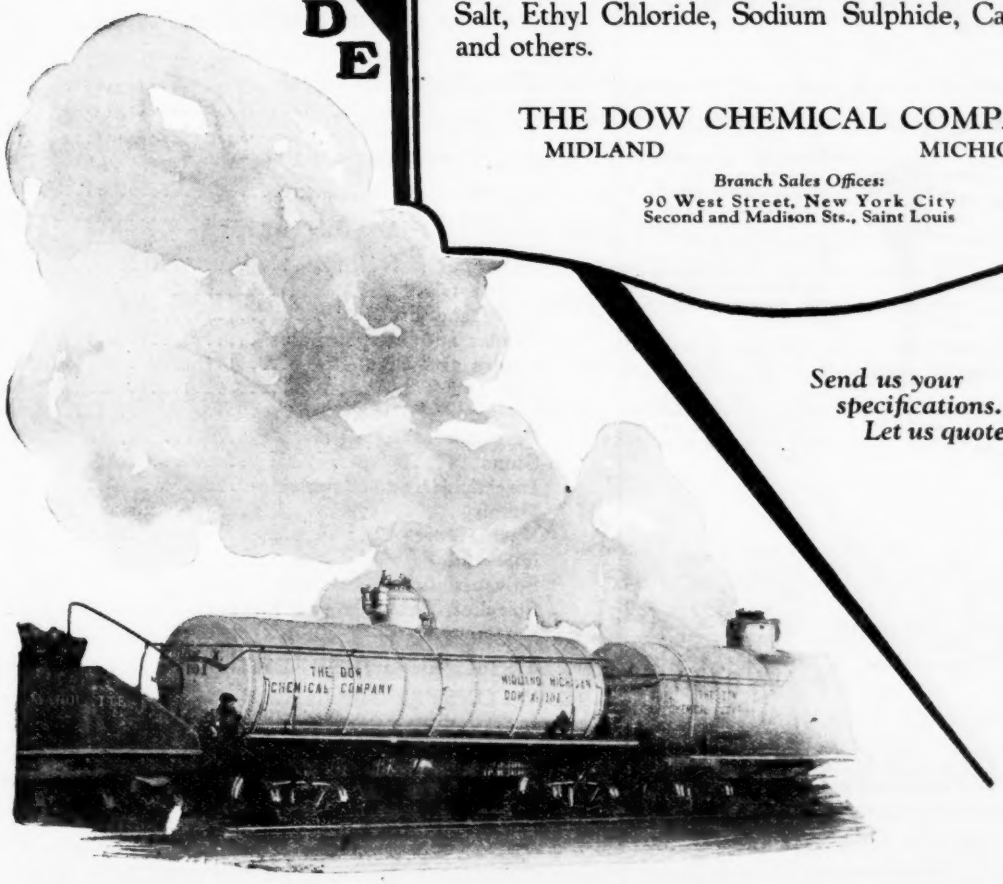

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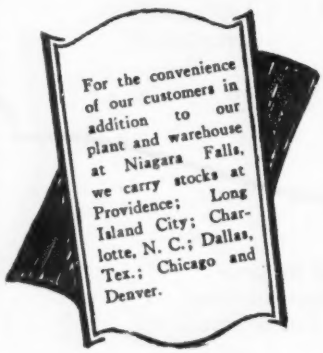
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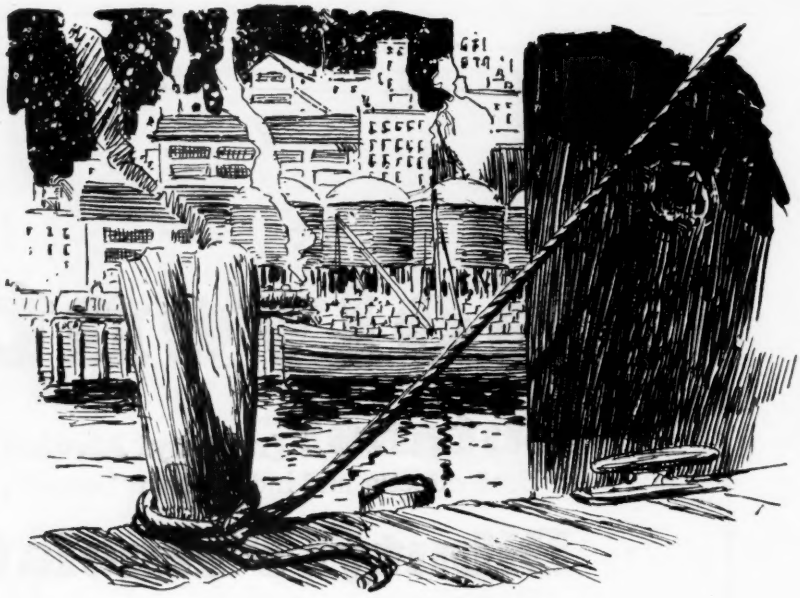

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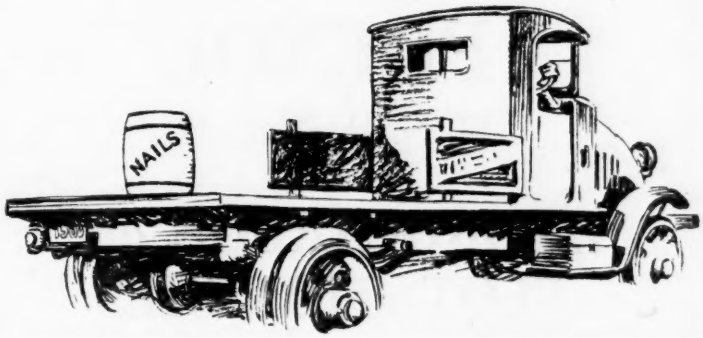

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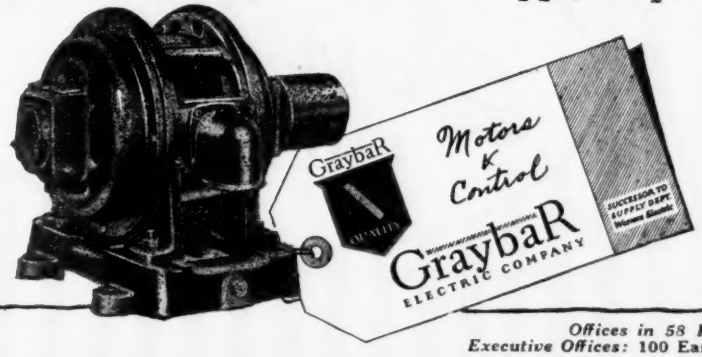

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CHEMICAL MARKETS

VOL. XIX NEW YORK, JULY 22, 1926 NO. 11

Concentrating Business

IN the ten years from 1914 to 1924, the number of industrial plants in the United States producing over a million dollars worth of goods per year increased from 1,900 to 10,326 . Nor is this striking growth of big scale production shown merely by these figures. The large unit plants today employ 57% of our industrial workers, and they produce 66% of the total manufactured goods of the country. It is worthy of note that the bigger plants have a larger output per capita of workmen than the smaller, and while this is probably more or less offset on the company's balance sheet by greater overhead and heavier investments in buildings and machinery, nevertheless these figures substantiate the accepted belief that big scale production is the most efficient.

THESE statistics of the National Industrial Conference cover the entire country and are for all industries; but they are pregnant with meaning in the chemical process industries, since chemical operations of all industrial processes yield most efficient results from big, continuous production. We doubt, therefore, if there is an industrial field which offers a greater opportunity for concentration. Contrarywise, no other industrial group is suffering more today from scattered, duplicated, uncoordinated production.

IN this issue is published a review of the sensational growth of the German Chemical Trust. The I. G. expansion, reaching out from a center of coal-tar chemistry, embraces today such widely divergent fields as fertilizers and artificial jewels, motor fuel and rayon. Each link of these activities is chemically forged not only to the links before and behind it, but also on both sides, so that the Trust is a closely woven net rather than a chain of chemical operations. The vision of Stinnes has become in reality the most comprehensive and powerful industrial organization in the world today.

THERE is a threat to the entire world in such a chemical colossus with its arms embracing all chemical markets the earth around. Remembering the vital position of chemicals in every industrial operation and not forgetting their place in modern warfare, the contemplation of these world-wide chemical activities is disconcerting enough, especially when even the faintest approximation of such interlocking interests, chemical, financial, aad commercial, is utterly impossible in the United States. Our demagogues would be well supported in their denunciation of an American I. G. Nevertheless that German giant has drawn a pattern which, if it is an unattainable ideal, is still a potent inspiration.

BENZENE EASY THIS SUMMER

An easy condition in the market for benzene and other light oils at this time of the year is unusual. Ever since the armistice when motor fuel producers absorbed surplus stocks of these products held by the Government, the greatest outlet for them has been in this direction. During the Summer months of the past number of years benzene has been at a premium due to the fact that motor fuel blenders were active in greater numbers. Gasoline originating from a comparatively unknown independent refiner could be marketed above the prevailing price of standard brands, instead of below that price, if it were a "benzol blend". It did not make any particular difference to some of these blenders if they had the recognized standard blend of 60 per cent gasoline and 40 per cent benzol or not. All that was required was that the product could be labeled a "benzol blend".

But the recent developments in anti-knock products has apparently caused a decided recession in the demand for benzol for this purpose. Standard Oil of New Jersey and many of its subsidiaries have very successfully marketed ethyl gasoline under various trade names. Other gasoline refining companies have produced non-knocking gasolines direct from crude oil by improvements in the cracking process. Perhaps the benzol blenders will continue to market their products but there will be some doubt as to whether they can obtain as great a premium over straight gasoline prices. If this price differential is lessened it will have a decided deterrent action on their activities.

SULFUR AND ARSENIC

From the point of view of the chemical industry some potent stimulant for the sale of calcium arsenate is needed more than any increased demand for sulfur; but Nature refuses to assist. Reports from the cotton fields are all to the effect that it is the hopper, not the weevil, who is attacking the crop this season. Possibly this is just a bit of spite work on the part of Dame Nature for the chemist's recent victories in making so many of her pet products synthetically in the laboratory.

The dry spring and hot weather have conspired together to favor the multiplication of the cotton hopper who is said to be flourishing, especially in the Mississippi Delta, Louisiana, Texas, and Alabama. The same conditions have been discouraging to the activities of the boll weevil, although sporadic accounts of his appearance come from various sections. The hopper is not a new comer, but he is proving more dangerous than ever in the past. The approved method of fighting him is dusting with sulfur; but if he becomes really rampant, the recent death of Dr. Hunter of the Bureau of Entomology, who had been studying this pest for the past three years, will prove to be a serious and indeed untimely loss to insecticide progress.

Chicago has adopted an ordinance against the use of toxic solvents in dyes for shoes. It is doubtful whether any more attention will ever be given the matter or whether it could be enforced. The number of superfluous laws is increasing so rapidly that officials hardly find time to read them, much less time to enforce them. No industry has bowed to the public interest more willingly than the dye industry, and often at great financial loss to individual manufacturers. The history of the dye industry during the world war tells of the efforts to supply proper colors to the Government and the various trades. If there is anything wrong about the shoe colors, the public can rest assured that it will be voluntarily corrected.

Pleasing and certainly appropriate decorations for one of the new buildings of the University of Texas have been worked out of the famous brands of the great cattle ranches of the Lone Star State. Conspicuous among these is the SMS brand of S. M. Swenson, father of E. P. Swenson, president of the Freeport Texas Sulphur Co. Thus in this one symbol Texas pays homage to a sturdy and aggressive family of pioneers in the development of two of her greatest products, beef cattle and brimstone.

While some sections report a decline in employment, it must not be forgotten that strikes have occurred, in a few industries, particularly in New Jersey where the textile mills are on part time or completely shut down. In the West and Middle-West the reports are very favorable. Certain seasonal trades are always slack in Summer and some other industries run light in hot weather, but the outlook over the country is good, according to the Federal Reserve Banks.

[*Ten Years Ago*]

(From "Drug & Chemical Markets," July 19, 1916)

Cable despatches from London say the British Government on July 18 published in "The Official Gazette" a list of eighty-seven American individuals and firms placed on the black list under the Trading with the Enemy Act. This list includes names of bankers and brokers, dealers in metals, hides, chemicals, and commission merchants who specialize in foods.

Members of the drug and chemical trade in London are interested in the proposals of the Allies Economic Conference in Paris. The Association of British Chemical Manufacturers has been formed and a committee is drawing up the constitution. On this committee appear the principal manufacturers of the country as well as producers of intermediate products. The limitation of acetone supplies in England is serious as all supplies are under Government control, and chloroform manufacturers are rapidly being cut off from their limited deliveries.

The arrival of the German submarine "Deutschland" with a cargo of aniline dyes that is variously estimated at from 500 to 700 tons is the all-absorbing topic in dyestuff and chemical circles; but it is significant that the sensational features of the U-boat's voyage are found more interesting than discussions of the effect her cargo will have on the dye market. It is conceded that even 700 tons, the maximum conservative figure, will have little or no effect on prices, as it is pointed out that even if Germany succeeded in docking a submarine carrying 500 tons of dyes in an American port every week of the year, it would not meet our demand for dyes.

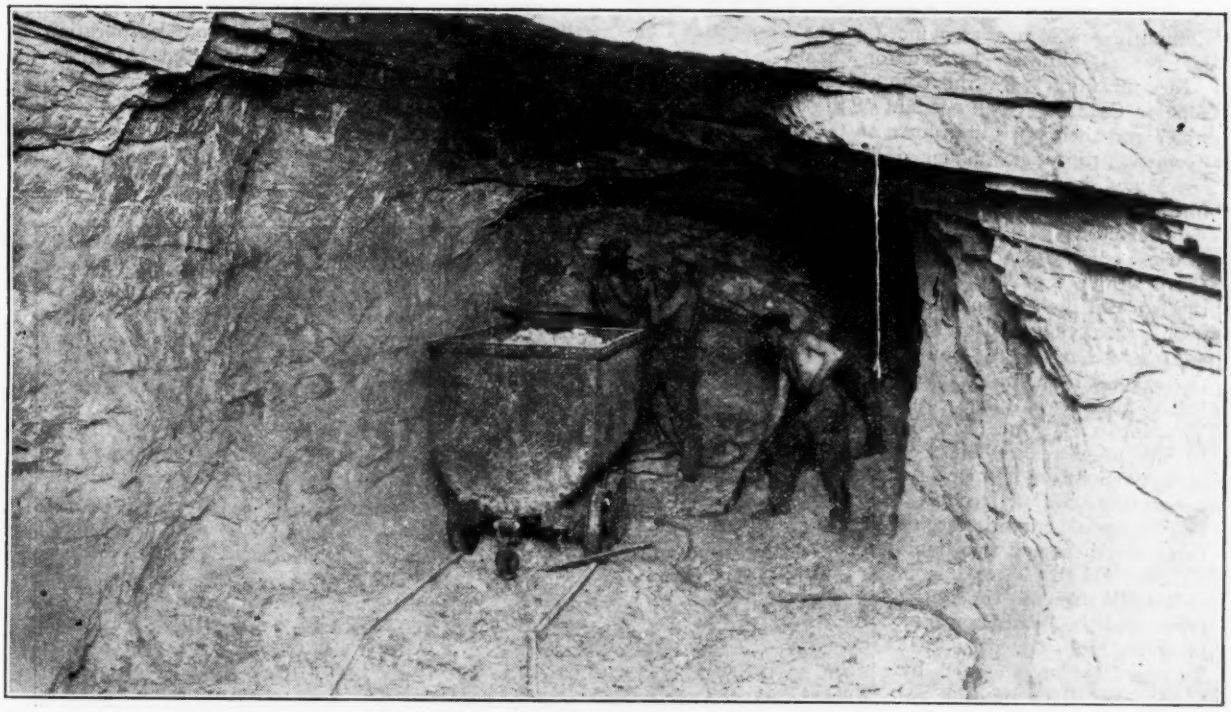
Potash in France

View of Amelie Mine No. 1

IT IS estimated that the Alsatian basin contains 300 million metric tons of pure potash. The mines which yielded 350,000 metric tons of crude salts in 1913 produced 1,061,196 metric tons in 1920; 1,326,000 metric tons in 1922; 1,664,000 metric tons in 1924, and 1,925,838 metric tons in 1925, with the probability that 5,000,000 tons will be produced in several years. The two groups operating the existing mines are known as Societe Alsacienne des Mines de Potasses, which exploits the sequestrated mines of former German ownership, and Societe Kali-Sainte-Therese, operating properties of former Franco-Alsatian ownership. These companies have created a common selling organization, known as Societe Commerciale des Potasses d'Alsace. This agency has figured in negotiations and conventions with the German potash syndicate relative to divisions of the world market.

Alsatian production of pure potash is less than one-third that of German mines, situated in Saxony, Hanover and Mecklenburg, the figures being 248,528 and 269,784 metric tons, respectively, for the Alsatian mines in 1923 and 1924, as compared with a German output of 700,000 and 800,000 metric tons for the respective years. Since the war French mines have steadily augmented their production, while the German enterprises have encountered difficulties common to those affecting other industries beyond the Rhine. The consortium movement began actively in 1922 and led to an alliance around two large groups, that of Wintershall and that of Salzdetfurth, the first representing 34.4 per cent and the second 16.9 per cent of the trust participation. The rest of the industry was less concentrated. The trust encountered an invigorated French competition in addition to interior troubles produced by the flight from the mark, and thereafter the period of stabilization with a penury of capital. Some undertakings were abandoned and others suspended.

FRENCH companies suffered from monetary influences, being obliged to lower prices in consequence of unfavorable exchange. An international accord was projected in 1924 with a temporary arrangement relative to world market distribution; it was made more definite in 1925 and has recently been perfected for a series of years. The existing division of 70% to the German and 30% to the Alsatian mines has been taken as the basis for the definite agreement, but a clause obtained by the Alsatian syndicate provides that an equal division of the surplus will be made when the annual exports from both groups of mines reach 840,000 metric tons. It is officially maintained that the recent accord con-



Mining Potash in Alsatian Mines

tained no mention of the United States market, which absorbs about half of the world exports, this being left to further consideration and a supplemental agreement. In the interim it is understood that the provisional 70-30% quotas apply to American demand.

IN 1924 French production of potash was 271,614 metric tons, of which 269,784 metric tons came from the Alsatian mines. Very little potash has been found in France outside of Alsace, the most notable deposit being at Sastagnede in the Department of the Basses-Pyrenees. The extent of Alsatian beds has already been considered.

Perhaps the most important factor confronting the Alsatian, as well as the German potash industry is the possibility of finding large sources of supply in other parts of the world. French producers have been keenly interested in reported intention of the United States to exploit large prospective potash resources in Texas, as they realize that the discovery of an adequate American supply will take away their best customer. They have also noted the tendency of other countries to seek relief from subservience to the Franco-German potash trust, with possible development of sources in Canada, North Africa and elsewhere. Hence, although present domination of the world market is assured, the uncertainty of the future export trade has caused European producers to adopt an intensive campaign to augment the employment of potash salts in home countries.

Since seizure by French Government in 1918 of German-owned potash properties in Alsace, the ultimate regime for their commercial exploitation has been a pending question before Parliament. Chamber of Deputies decided on March 15, 1923, to concede the mines to a private corporation wherein the State and private shareholders would be represented. Finance Committee of the Senate substituted for this proposal a plan for establishment of a national office, analogous to that controlling the collieries of the Sarre Valley, or that operating the ammonia industry at Toulouse. This, it was asserted, would be a sort of State monopoly more in harmony with the commercial exactions of the present era than the former kind of monopolies. It was the second conception which found favor with the Senate Committee on Mines, as evinced in the Committee's recent report submitted by Senator Cazals.

In connection with the committee's recommendation Senator Cazals gave an account of the acquisition of the mines and their operation down to the present. Former German properties, managed by Societe Alsacienne des Mines de Potasses, consisted of concessions of the former Deutsche Kaliwerke de Berterode; Max, Marie, Marie-Louise, Joseph-Else to the southwest of the basin; the lands of the Hohenzollern group, the Reichsland or Fernand, and Anna, to the South, the exploitations of Winterhall or Lanpen Mulhen; and Theodore and Prince Eugene to the northwest. The Societe named is not a private corporation but a technical and financial commission of three members and two liquidators. Of the latter one is industrial director and the other judicial liquidator, or receiver, substituted in 1921 for the liquidator named by the State. The present receiver, in pursuance of a law of March 24, 1924, proceeded to acquire the mines for a valuation of 208 million francs, payable by annuities of 10 millions during ten years, afterwards in installments of 15 millions. By this operation Germany was credited with reparation payments to the amount named, with obligation to reimburse the former shareholders.

In the presence of several proposals for the definite status of the properties, the Chamber of Deputies in 1923 adopted a project for turning over the mines to a commercial organization, with State representation and participation by workmen and other interested groups. The bill forwarded to the Senate prescribed the following distribution of capital: 50 per cent to agricultural groups, 15 per cent to Alsatian Departments, communes and insurance co-operatives, 15 per cent to Alsatian or French bearers of Kuxes, a certain type of share in the former German-owned properties, 10 per cent to chemical industries, 5 per cent to communes and individuals suffering from the war, 5 per cent to the personnel of the mines, and unsold shares to the public, with preference for former soldiers, wounded veterans and war-sufferers up to 50 shares per person. These different groups and the State were to be represented on the board of directors, the State by three members. A commercial office would assure the sales service, and prices upon the domestic market would in no case exceed those for export, except temporarily through permission of Council of State.

For this system Senatorial committees have substituted a National Office restrained by legislative control of its expenses and freed from budgetary regulations. Amendments approved by the Committee on Mines relate to the composition of Council of Direction, to the advantage of Alsatian Departments, the eventual repurchase by the State of the Kuxes and the obligation of new concessions to participate in the commercial sales organization.

IT IS uncertain whether the Senate Committee plan will be accepted by the Chamber, if adopted by the higher body, as a sharp diversity of opinion exists among the Deputies respecting the regime most appropriate. One proposition, which may again emerge in the debates, called for the formation of a private corporation in which only agricultural, industrial and Alsatian interests would figure. The proposition of M. Mistral, which has more support, provided for the institution of State ownership and control, with the collaboration of agricultural groups of Alsace-Lorraine and interested chemical syndicates. Successful exploitation of the

Decantation Tanks in Manufacture of Muriate of Potash

properties since 1919 by State management gives a weighty argument to proponents of this plan. However, commercial circles are opposed to a State-owned industry, and if the Socialistic influences can be repelled, it may be that a system of private ownership will eventually be adopted. From the standpoint of the Government's finances, the sale of the properties through a large stock issue, commensurate with the value of the mines, would seem the most prudent and remunerative policy.

GEOLOGICAL researches along the Rhine valley, from Bale to Strasbourg, have shown the relations, not yet well defined, between the presence of the salts and that of hydrocarbons. The basin of the Rhine was produced by a collapse in the vault of the Vosges-Black Forest plateau, the invasion of this depression by the tertiary sea from the Strait of Hesse, the closing of this strait with a resultant transformation of the Rhine gulf into lagoons of briny water, and finally by a return of the waters before a definite closing of the basin and the raising of the fallen strata, which forced the Rhine to change its course from the Department of Doubs to a northerly direction at Bale.

The first invasion of sea water and the first closing of the passage brought about formation of organic deposits in an excess of salty liquid. The products were hydrocarbons, of which petroleum of Pechelbronn field is the best example. At the same time sulfate of lime, sodium chloride, mixed chlorides of potassium and magnesium, and sulfates of these elements appeared successively in the super-saturated waters. The second invasion from the sea washed the salt banks and eliminated the sodium chloride to the advantage of chloride of potassium in sylvinite, the richest of the salts.

Potash salts found in mines of Alsace, particularly those encountered in State mines between lines running from Cernay to Guebwiller and from Mulhouse to Ensisheim, are almost exclusively of sylvinite. This is a double chloride of potassium and sodium found generally in white and uncolored strips, weighing as much as six pounds, inserted in the crevices of the soil or forming stalactites. The sylvinite contains marine salt and the potash contains some magnesium chloride. In consequence the action upon certain plants, such as sugar beets, potatoes and tobacco, is sometimes noxious. But it is claimed that these potash salts are superior to the products of the German mines at Stassfurt, near Magdeburg in Saxony, which are strongly permeated with carnalite and other compositions into which enter sulfur, sodium, and borax containing magnesium. Furthermore, according to the eminent French chemist, Georges Claude, it is possible by precipitating from synvinite bicarbonate of soda to obtain chloride of potash and chloride of ammonia, two excellent fertlizers.

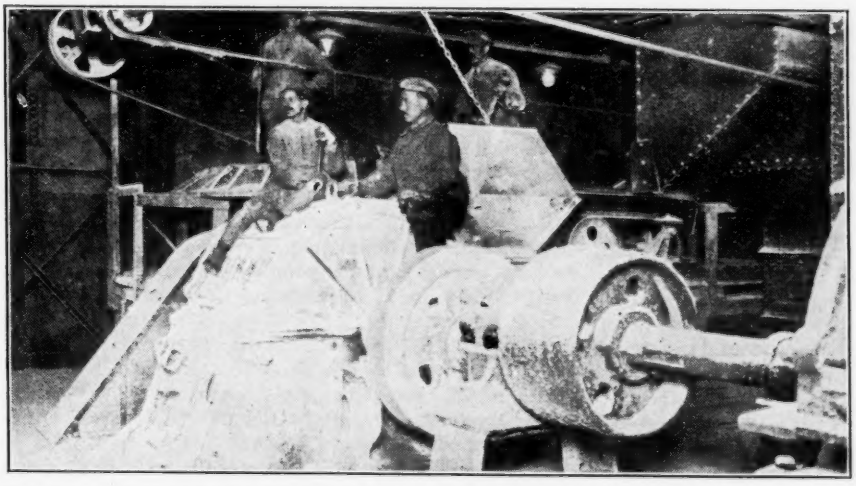
The hydroscopic degree of Alsatian sylvinite is only 0.90 per cent, while water content of German salts extends from 5 to 13 degrees. This facilitates transportation and conservation of sylvinite from Alsace, as well as extraction, while protection of deposits in Saxony from crumbling requires substantial work of reforestation. In resume, it is asserted by French potash specialists that Alsatian sylvinite contains 12.5 per cent to 22 per cent of pure potash, whereas the carnalite of Saxony yields only 12 per cent.

Alsatian sylvinite is delivered for agricultural usage in the form of ordinary sylvinite containing from 12 to 16 per cent of pure potash and in the form of rich sylvinite containing from 20 to 22 per cent of pure potash The latter is of more interest from the sales standpoint when transportation for more than 400 miles is involved.

In addition to sylvinite smelters working in connection with Alsatian mines, turn out chlorides of from 50 to 60 per cent pure potash and sulfate of 48 per cent purity. Besides the four metallurgical mills annexed to the mines, Theodore, Reichsland, Amelie and Alex of the Societe Alsacienne des Mines de Potasse, which exploits former German veins while awaiting action by the Government defining their status, the Societe Kali-Sainte-Therese has put into operation a new factory for the production of potassium chloride at Ensisheim, with a capacity of 250,000 metric tons per year.

IT IS interesting to note the influence of potash salts upon plant growths. With the application of 400 kilograms of superphosphates and 100 kilograms of sulfate of ammonia per hectare (2.47 acres), a resultant wheat yield is 18.1 quintals of grain and 23.3 quintals of straw. If to these fertilizers are added 400 kilos of rich sylvinite, the yield obtained is 24.4 quintals of grain wheat and 34.3 quintals of straw. For the grapevine, it is found that the use of 300 kilograms of superphosphate and 150 kilograms of sulfate per hectare give 93 quintals of grapes; with the addition of 600 kilograms of rich sylvinite a yield of 114 quintals is attained.

According to chemical researches and practical tests in recent years, very satisfactory results have been secured from utilization of potash in quantities greatly exceeding customary applications in former times. A professor of agriculture in Luxemburg states that in Holland and northern Belgium enormous quantities of potash are used generally in the cultivation of fruits and vegetables. In viticulture a maximum amount of 2,200 kilograms of rich sylvinite has been employed with remarkable results by agricultural experts attached to the school at Montpellier, France. Experiments in Luxemburg have shown that substantially increased yields of beets, potatoes and other vegetables can be obtained by more generous use of potash fertilizer.



Grinding Raw Potash at Mines

Chemical Developments in the Paper Industry

By THOMAS J. KEENAN
Associate Editor of The Paper Industry

From an industry that was far removed from everything chemical regarding its processes the paper industry has become one that is deriving untold benefits from chemical application to its problems. Practical abandonment of rags in the manufacture of paper is here and the substitution of high percentage alpha-cellulose derived from wood pulp for cotton linters in nitrocellulose lacquers is thought to be near at hand.

But with this chemical contact on the part of paper makers has come the manufacture by them of their own chemical raw materials. Low costs on these chemicals due to overhead being absorbed in other directions has caused some of them to enter chemical markets.

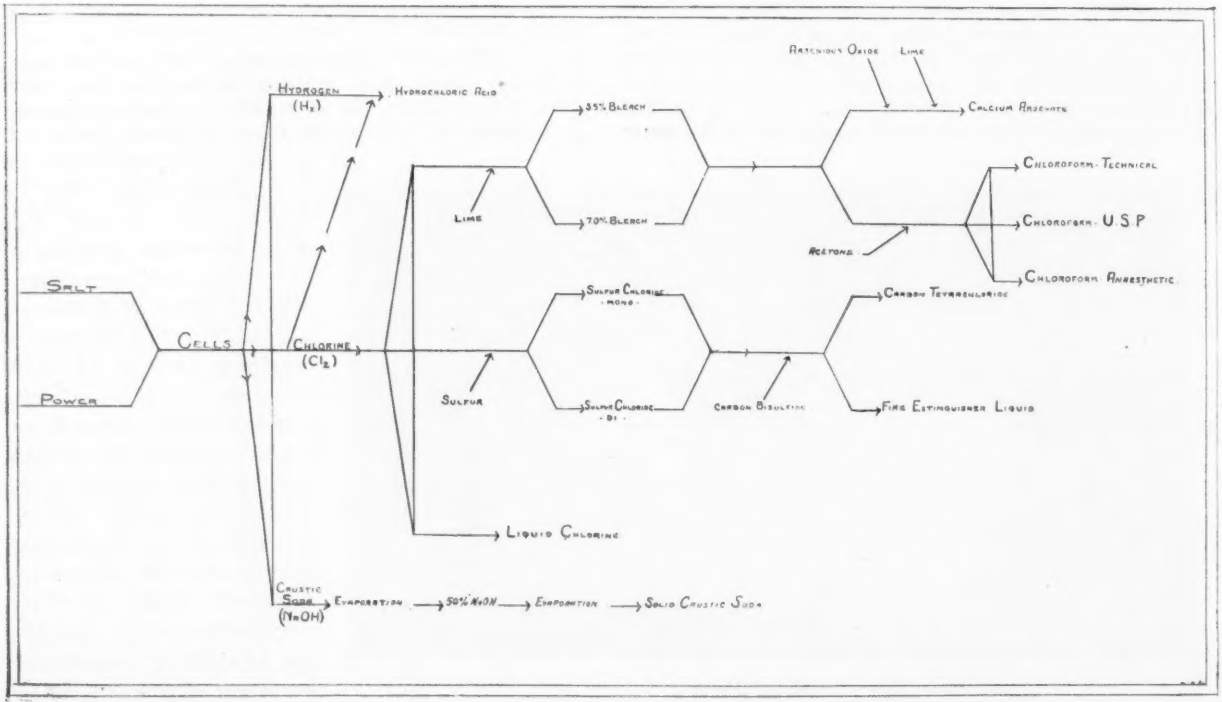
—THE EDITORS

THE evolution of papermaking from a simple craft of primitive devices and processes to a highly specialized industry that affords wide scope for the inventive ability of chemists and engineers began early in the Nineteenth Century when the demand for paper outstripped the supply of the principal papermaking material, rags. Coupled with the spread of education and a growing national prosperity which brought new and larger uses for paper, there was an increase in the productive capacity of mills by the introduction of larger units of machinery capable of turning out continuous rolls of paper of greater width at accelerated speed. It then became necessary to find new sources of papermaking material and all kinds of substitutes were experimented with; wood became the choice, and the indications are that wood fiber will remain for years to come the preferred material, notwithstanding the fact that many other plant fibers such as sugar cane, corn stalks, bamboos, and the various straws and grasses have been used successfully in paper manufacture on a large scale.

No matter what the dictionaries may say, paper is today made of wood, the few exceptions being filter paper, bank note paper, vellum papers to replace parchment, and the finer grades of bond and ledger papers. The body of some bond papers and of many of the so-called linen papers is also of chemically prepared woodpulp, which has lasting properties equal to flax or cotton fibers when properly treated.

The scarcity of raw material was relieved to some extent when the method of producing paper pulp by grinding wood

(Continued on page 480)



Germany's Chemical Colossus

Recent developments in the vast expansion of the I. G. have been proudly, but very cautiously set forth in the German press, notably the "Chemiker-Zeitung" and the "Frankfurter-Zeitung," and the gigantic scale upon which these activities are being extended was reviewed in considerable detail just prior to the annual meeting of the corporation, last month, in a circular by the Berlin banking house, Schwarz, Goldsmith & Co. The new and startling facts set forth are here summarized for our readers.

ALTHOUGH the I. G. Farbenindustrie A.-G. was so short a time ago organized to promote the dyes interests of its five original component companies —as its name indicates—dyestuffs are today but an insignificant portion of its activities. At the present moment its chief interests are concerned with fertilizers. Tomorrow, chemical fibres, both silk and wool will, unless all signs fail, become the major enterprises. Astute students of the trust are forecasting that eventually synthetic fuels will become the principal business.

A beginning with dyes and medicinals, aromatic and photographic chemicals has already gone on to include the following products, which, it must not be forgotten, are all made from chemicals, synthetically, by chemical processes; alcohol and motor fuel, silk, oxygen, rubies, acetic acid, lithopone, ammonia, lacquer, fertilizers and insecticides, and a fairly complete range of all industrial chemicals used in its own multitudinous processes, with a salable surplus that gives the I. G. virtual control of the chemical markets of Central Europe.

With Cassius, its competitors the world over may well exclaim, "Upon what meat does this our Caesar feed that he is grown so great?" No wonder that in Germany, the snowball-like development of the I. G. attracts to itself any company or group of interests with which it desires to amalgamate in plans for still further expansion. Small wonder that abroad this gigantic company, the largest, most powerful of all business corporations in Europe, having now demonstrated that it will not fall of its own weight, is able to negotiate all sorts of advantageous sales arrangements.

One most tangible evidence of I. G. expansion is the list of the principal companies which, according to the recent report on its affairs published by Schwarz, Goldsmith & Co. now includes the Badische Co., Ammoniakwerk Merseburg, F. Bayer & Co., Meister Lucius and Bruening, Casella & Co., Griesheim-Elektron, Agfa, Weiler-ter-Meer, Dahl & Co., Karl Jaeger G. m. b. H., Kalle & Co., Oehler, and Chem.-Werke Griesheim. In addition are many companies dealing with special industries. Under the heading of fertilizers and agriculture are enumerated 5 (including a sugar factory); under chemicals, 5; under electrochemical and metallurgical, 10 (one in Barcelona); under coal, lignite and oil, 9, (including Montanwerke, Bergin Kohle, the Evag, and Deutsche Gasolin); under compressed gases, 3; under textiles, 5. Under foreign sales companies are mentioned the General Dyestuff Corporation. Though under the sales heading, the American corporation is stated to have factories in Albany and Paterson. The list ends with the significant statement that it is not known, outside the I. G., if the above enumeration of members is complete.

In the German press and among financial circles in Berlin the recent developments in artificial silk have been attracting the greatest attention at the moment. "By means of negotiations carried on with great diplomatic skill the I. G. has succeeded in coming to a working arrangement with the principal artificial silk manufacturers of the world," says the bankers' circular. As regards viscose silk, it is pointed out that Courtaulds of England, Glanzstoffs of Germany, and the Enka company of Holland are already working together; and the now assured joint activity of the I. G. with these, and with the German Bemberg company (the latter manufacturing cuprammonium silk), will probably be very profitable. For a number of years, viscose silk has been produced in increasing quantities by the I. G. at Wolfen, and Dr. P. Bronnert, former director of Glanzstoff and Courtaulds are erecting a joint factory which is being operated at his works in Strasburg. As Glanzstoff and Courtaulds are erecting a joint factory near Cologne, it is probable that the improved viscose process will be accessible to the I. G.

A large new factory for the production of cuprammonium silk, to cost about 16 million marks, which the I. G. is now building, will have a daily output of 10,000 kilograms. Up to now, cellulose acetate silk has not been manufactured in Germany, but the Glanzstoff and Agfa companies, as representatives of the I. G., have organized for this purpose, the Acetat-Gesellschaft. It may be noted that the I. G. will be in a position to supply the necessary chemicals (acetic acid, caustic soda, cellulose, carbon disulfide, dyestuffs, etc.) not only to its own artificial silk factories, but also to those having working arrangements with it, such as the Glanzstoff company and the new Glanzstoff-Courtaulds company. It may be assumed that the I. G. will produce 12-15,000 kilograms of the three different kinds of silk daily, which indicates an annual production of 3-4,000 tons.

Synthetic Automobile Fuel

Sensational as this expansion is, it was motor fuels that held the center of the stage at the annual meeting last month. German newspapers have been full of news of a large, new coal distillation plant in the heart of the German lignite fields, which, supported by the well-known activities of the I G. in developing anti-knock mixtures, prompts prophecies that the Trust will soon put Germany in a position of independence from foreign sources of motor fuel. The directors admitted to their stockholders at the recent meeting that the motor fuel developments had reached a "satisfactory stage" and that their company has joined forces with certain foreign undertakings in the Deutsche Gasolin, in order to be allied with their oil-selling organizations.

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Preserving and Fireproofing Wood

IN ITS commercial uses, wood is protected from the ravages of nature and from fire by the Arthur Arent process which consists of impregnating the wood with antimony trichloride. The trichloride is used with solvents, principally benzene and its analogues. This process does not protect from the elements, such as snow and rain, and their subsequent damage by expansion through freezing. It does, however, protect from vegetable life in the form of fungi which cause rotting, and also against animal life which weaken or destroy by cutting, boring and eating. Toxicity of the impregnated antimony compound to animal and vegetable life is the cause of this protection.

For protection against fire, the process also extends to fabrics and any fibre compound which will lend itself to the incorporation of the antimony compound.

The process from the chemical angle is one of solution, treating for saturation of the fibre, evaporation of the benzene, recovery and reusing of distillates.

Efficiency of this treatment depends entirely upon effect of antimony trichloride on animal and vegetable life. When the wood is subject to moisture, the antimony trichloride does not remain as such since it is insoluble in water and breaks down into antimony oxychloride and then into antimony oxide. Antimony oxide is practically insoluble—one part in 55,000 parts of water. The wood would have to be subject to the elements for many months, probably for years, excepting in the case of piles, but eventually the oxide would be formed. The trichloride and oxychloride are known to have the desired preserving properties, but since it is almost always converted into the oxide, that is the product that must be considered. It is believed, that the conversion to the oxide takes two years at the most. After the final conversion to the oxide it is not believed that the wood will have any protection against fungus growths, because of the inertness of the oxide in moisture or water. If the fungus growths create sufficient acids to react with the antimony oxide, corrosive substances will be formed which will kill the fungus. But if this happens, the antimony oxide will soon be depleted by the acid, until there is none left around the surface where the fungus clings and does the damage. This point has not as yet been determined.

As long as the antimony compounds remain in the wood in any form, the wood is protected against eating by animal organisms. Any of the antimony salts entering the stomach of these animals, will create a poison that will kill.

Fireproofing experiments carried out with wood, cloth and paper, showed only a charring, but no flame after they were removed from the fire. Further experiments carried out with these products after they had been repeatedly soaked in water and then dried in imitation of weather conditions, did not give such satisfactory results as the freshly treated materials. They still resisted fire, but the red glow in the charred portions remained alive longer, and in some cases a flame was secured from the wood when it was held in the fire.

Butyric acid is made from butyric aldehyde by allowing the liquid butyric aldehyde trickle down a tower in which there is an oxygen-carrying catalyst, such as chromic acid. U. S. Patent No. 1,580,137.

Chlorine peroxide is employed as a bleaching agent in bleaching organic materials of various sorts, according to U. S. Patent No. 1,580,136.

Who's Who in the Chemical Industry

Charles Peirce Barton, vice-president, Robinson-Pettet Co., Louisville, Ky. Born: Elyria, Ohio, June 4, 1861. Mar.: Henrietta Whitestone, Louisville, Ky., Oct. 11, 1888. Children: (2) son, Chas. P. Barton, Jr., daughter, Mrs. Edward Davis Morton. Educat.: Louisville Public Schools and Louisville Male High School. Business: Began as assistant bookkeeper in 1878, elected treasurer, 1890; vice-president and treasurer, 1906; vice-president since 1925. Director of Louisville Board of Trade, 1907-13. Member: Pendennis Club, Louisville Country Club. Hobby: Golf.

Watson Wales Farnsworth, president, Toledo Rex Spray Co., Waterville, O. Born: Waterville, O., Nov. 21, 1855. Married: Anna B. Norton, Maumee, June 16, 1881; and Adelaide A. Counter, Toledo, Oct. 4, 1911. Children: Ruth F. and Frank Norton. Education: Common graded school and one year in seminary. Business: President W. W. Farnsworth Co., and president Toledo Rex Spray Co., 1908 to date. Public service: Senator from 34th district of Ohio for 85th legislature; member appeal board selective service in world war; general assembly member of constitutional convention for 86th legislature. Member: Ohio State Horticulture Society (president 4 years, secretary 14 years) F. & A. Mason. Hobbies: Fruit growing and political economy.

Paul Lamar Fleming, president, John B. Daniel, Inc., Atlanta, Ga. Born: Atlanta, May 9, 1873. Married: Marian Clifford Hall, June 14, 1911. Children: Ellen Marian, age 10. Education: Atlanta public schools, Univ. of Georgia, A. B., 1894. Entered John B. Daniel from college; at death of Mr. Daniel in 1914 became pres. Public service: Board of education, Atlanta, 3 years (pres. one year). Member: Elder Presbyterian Church, Chi Phi Fraternity, Atlanta Athletic Club.

Sidney Clarke Moody, department sales manager, Calco Chemical Co., Bound Brook, N. J. Born: Evanston, Ill., Nov. 13, 1895. Married: Frances Glenn. Montclair, N. J., May 7, 1924. Education: Williams College, A. B., 1917. Business: Calco Chemical Co., June 1919 to date. War service: Field Artillery Jan. 1918 to March 1919. Member: Zeta Psi Fraternity, Williams Club, Salesmen's Association American Chemical Industry.

Ralph Oliver Phillips, Chief Chemist, Forestal Land, Timber & Railways Co., Ltd., London, Eng., Tannin Corp., New York. Born: Somerville, Mass., Feb. 2, 1892. Unmarried. Education: Tufts College, B. Sc. in chemistry, 1915, M. Sc. in chemistry, 1916. Business: Pittsburgh Plate Glass Co., chemist and superintendent varnish works; Picatinny Arsenal, War Dept., chief inspector smokeless powder and high explosives plant; instructor in charge U. S. Army School for inspectors of powder and explosives; U. S. Navy, asst. inspector powder and explosives; Barrett Co., chemist and development engineer; Tannin Corp., consultant; Natal Tanning Extract Co., Pietermaritzburg, South Africa and Buenos Aires. War record: Lieut. U. S. Navy. Member: Chemists' Club, New York, Amer. Chemical Society, Amer. Leather Chemists' Assn., Sigma Tau Alpha Fraternity, Boston Yacht Club. Hobbies: Motoring, yachting, swimming.

[News and Markets Section]

Nitrate Report Shows Sulfate Competition

Semi-annual Report from London Shows Reduction of 248,000 Tons in Nitrate Consumption Caused Principally By Increased Production of Synthetic Nitrogen Products

(*Special to* CHEMICAL MARKETS)

London, July 16—Consumption of artificial nitrogenous fertilizers has again increased during the year just ended and is estimated, in terms of pure nitrogen at 1,187,000 tons against 1,088,000 tons the previous year, and 970,000 tons for the year ending June 30, 1924. The feature has been the large increase of synthetic nitrogen products, the production of which is estimated at 583,000 tons against 450,000 tons and 355,000 tons for the two previous years. The production of by-product sulfate of ammonia has remained more or less stationary, being estimated at 280,000 tons, against 275,000 tons and 275,000 tons respectively. Stocks of all the above articles are reported to be normal so that consumption can be estimated at approximately the above figures. Consumption of Chilean nitrate has decreased in terms of nitrogen to about 324,000 tons against 363,000 tons and 340,000 tons for two previous years.

Prices of both by-product sulfate of ammonia and synthetic nitrogen products have ruled about 10% below last year, whereas the price of Chilean nitrate was maintained by the Producers' Association at the same figure. For the coming year, the price of Chilean nitrate has been reduced 5 per cent, while by-product sulfate and synthetic products have been reduced 4 to 9 per cent—no doubt with a view to finding a market for a further increase in production of synthetic nitrogen, which is estimated at 150,000 tons of nitrogen for the coming year.

World consumption for the past year shows a reduction of 248,000 tons at 2,092,000 tons, against 2,340,000 tons; 2,192,000 tons, 2,159,500 tons and 1,544,000 tons for the four previous years. Consumption in Europe amounted to 831,000 tons, against 1,049,000 tons last year, in Egypt to 161,000 tons, against 121,000 tons; in United States to 923,000 tons, against 1,030,000 tons; in Japan to 50,000 tons, against 34,000 tons; and in other countries, to 127,000 tons, against 106,000 tons.

Falling off in consumption during the past year was due to a multitude of causes, the principal one being that production of synthetic nitrogen products has increased at a greater rate than was anticipated, the actual increase having amounted to 133,000 tons of nitrogen as compared with an estimate of 75,000 tons made at this time last year. Prices per unit of nitrogen were consistently and substantially lower than the price of Chilean nitrate, and, therefore, the latter merely filled the gap (after the production of the former was absorbed) and showed a reduced consumption of 39,000 tons in terms of nitrogen, which more or less corresponds to the increase in production of synthetic products over figures estimated a year ago. Other contributory and important causes were unsatisfactory methods of distribution as compared with the excellent selling organization of the combined producers of synthetic nitrogen; opportunity given to inland dealers of conducting a safer and more profitable business in competitive nitrogenous articles; violent fluctuations in Continental exchanges; encouragement given to and heavy subsidy paid on sulfate of ammonia by the French Government, and the low prices ruling for cotton and sugar beet which are the most important crops for which nitrate is used.

With exception of United Kingdom, Spain, Holland and Italy, where consumption has been maintained at about the same level, all European countries show substantial decreases. In France, the falling off amounted to 34 per cent, owing to large subsidy by French Government to sulfate of ammonia, which sold at £1 to £2 10s per ton cheaper than nitrate. Of 94,500 tons delivered from Germany and Baltic ports, 25,000 tons were consumed in Poland, 42,500 tons in Czechoslovakia, 20,000 tons in Germany and 7,000 tons in Russia and neighboring countries, against 56,000 tons, 58,000 tons, 20,000 tons and 6,000 tons respectively, last year. In Poland, the decline of 55 per cent was mainly caused by financial difficulties.

Total sales by Producers' Association for the nitrate year July, 1925 to June 30, 1926, were 2,111,000 tons, (of which 215,000 tons were for June delivery), or about 44 per cent of each oficina's quota (total quotas for past year were on a nominal capacity of approximately 4¾ million tons).

With probability of World's supply of nitrogen (exclusive of Chilean nitrate of soda) for 1926-27 amounting to about 1,029,000 tons of nitrogen, prospects for nitrate are uncertain and advisability of Chilean Government assisting producers to place the national commodity before consumers at a competitive price is all the more urgent. A reduction in duty of 1s per metric quintal would probably meet the case and if combined with an improved and reorganized method of marketing, the prospects for next twelve months would be considerably better.

It is reasonable to assume that lower prices already fixed for all nitrogenous products will stimulate consumption of nitrogen and it is hopeful that Producers' Association appears to realize that problems which confront the industry call for prompt and energetic handling. A prompt decision is urgently required, as the present uncertainty is having a detrimental effect upon the prospects of business for next season.

Costs have continued to rise during the year, owing to the increased levy on producers from Chilean income tax, and various social laws; and the industry is now burdened with about 6s 3d per metric quintal or £3 2s 6d per metric ton, in form of taxes and export duty. During the past year individual producers have only been allocated sales representing 44 per cent of

(Continued on page 447)

PERMUTIT CO SUSTAINED

Permutit Co. has been sustained by an unanimous decision in U. S. Circuit Court of Appeals in its basic patent covering apparatus for water softening by zeolites. The case had previously been decided adversely to Permutit Co. in U. S. District Court. This is the fourth time that the decision has been sustained, twice by U. S. District Courts and twice by U. S. Circuit Court of Appeals. U. S. Supreme Court has ordinarily refused to review patent cases where two different Circuit Courts of Appeals have given a similar decision, so it appears that the case is finally settled.

Insecticide & Fungicide Board of Department of Agriculture have issued service and regulatory announcements No. 55 giving the names of manufacturers of various insecticides and fungicides as well as opinions and information of general interest regarding questions under the insecticide act.

Chemists' Club house committee announces that twenty-two additional bedrooms will be ready about August 1 on the sixth and seventh floors of the club. Eleven of these rooms will be held as lease rooms for not less than thirty-day periods and the other eleven will be held as transient rooms.

Major Alfred L. Rockwood, Chemical Warfare Service, has been made Chemical Warfare Officer of the Ninth Corps Area, with headquarters at San Francisco. He relieves Major R. C. Ditto, who has been sent to Washington to attend the Army War College.

New York Sales Managers' Club has elected O. C. Harn, chairman, sales committee, National Lead Co., president. R. D. Keim, director and general sales manager of E. R. Squibb & Sons, was made vice-president.

Vanadium Corp. of America, New York, has appointed J. Alfred Miller, Jr., assistant general manager of sales. Mr. Miller, who has been with the Vanadium company since 1922, had been general sales engineer.

C. M. Bible has resigned as chief chemist of Read Phosphate Co. to accept a position at Mellon Institute of Industrial Research, Pittsburgh, Pa.

United States Gypsum Co. has just opened up a new mine at Canaan, Conn. A new plant has been built.

British Exports Down 8 Per Cent to June 1

Chemical Products Exported in First Five Months Valued at £9,608,976 —Ammonium Sulfate Exports Off Sharply

(*Special to* CHEMICAL MARKETS)

Washington, D. C., July 21 — Exports of British chemicals, drugs, dyes and colors during the first five months of 1926 were valued at £9,608,976—almost 8 per cent less than for the corresponding period of 1925 and 13 per cent less than in 1924, according to Consul Maurice L. Stafford, London. During the first five months of the years 1924 to 1926 imports have been fairly constant at slightly over £6,000,000.

The outstanding item in the British chemical export trade is the loss in ammonium sulfate orders—the 1926 shipments of 91,000 tons being 25,000 tons less than in the parallel periods of the two previous years.

Exports of sulfuric acid, rose from 815 tons in 1925 to 2,779 tons in 1926. Business in benzol and toluol also showed a remarkable gain, being only 136,986 gallons in 1925 as compared with 418,388 gallons in 1926. Tar and creosote oil rose from 16,161,867 gallons to 19,973,697 gallons in the first five months of the present year.

Carbolic acid, naphtha, sulfate of copper, distilled glycerin, saltpeter, caustic soda, and paints and colors ground in oil or water showed gains in varying degrees.

Exports of the following products during the period January to May, inclusive of 1926, were less than for the corresponding months in 1925: Bleaching powder, naphthalene, anthracene, crude glycerin, potassium chromate and bichromate, sodium carbonate, chromate and bichromate, quinine and quinine salts, and dry white lead.

J. A. Bernhard, vice-president of Sierra Magnesite Co., San Francisco, has been at Washington in connection with the hearing before Tariff Commission regarding proposed increase of fifty per cent on magnesite import duty. California producers offered figures to show that domestic output has declined, while importation has greatly increased since the McCumber bill took effect. They declared that while this country is capable of producing all the magnesite needed, it actually furnishes but one-third of this amount, owing to foreign competition.

Although the French imports of carbon tetrachloride increased in 1924, the United States lost ground as an exporter of this product to France, when its shipments dropped from 122,760 lbs. in 1925 to 80,080 lbs. in 1924. The amount supplied by Germany also declined to the extent of nearly 60 per cent of the 1923 figure of 223,420 pounds. Italy succeeded Germany as the leading source of supply. Preliminary figures of the trade of 1925 show the total importation of carbon tetrachloride to be 1,335,400 lbs.; the 1924 and 1923 totals are respectively 1,193,280 and 486,420 lbs.

EXPORTS $1,000,000 ABOVE JUNE IMPORTS

Washington, D. C., July 21 — June exports were valued at $338,000,000 against $323,347,775 for June 1925 and imports $337,000,000 against $325,215,735. During June excess of exports over imports was $1,000,000, against $1,867,960 for June, 1925.

For twelve months ending June value of exports was $4,753,516,204 against $4,864,581,164 for same twelve months of last year. Imports for the twelve months were $4,466,687,493 against $3,824,128,375. Excess of exports over imports was $286,828,711 against $1,040,452,789 for the same twelve months of last year.

Three men charged with conspiracy to transport alcohol in violation of the Volstead act were held in $3,000 bail each for a hearing before United States Commissioner Supplee on July 20, after they had been arrested by a dry agent at Curtis Bay. The accused are said to have been employed by United States Industrial Alcohol Co. at Curtis Bay, Baltimore. A watchman noticed some cans of alcohol outside the walls of the Industrial Company's works and notified the dry agent.

Col. Herman A. Metz, of General Dyestuffs Corp., who is a director of Interborough Rapid Transit Co., New York, acted as mediator between the striking motormen and the company last week in the New York subway strike. No agreement was reached in the conferences.

Dr. F. E. Beecher, National Aniline & Chemical Co., has been seriously ill for the past two weeks. He is now in the Presbyterian Hospital, Chicago, where from the last report he is doing as well as expected.

METHANOL BRIEF FILED

(*Special to* CHEMICAL MARKETS)

Washington, D. C., July 21 — Thomas J. Doherty, attorney for the American hardwood distillation industry, has filed a brief with the Tariff Commission in connection with the increase in the duty on methanol. Mr. Doherty contends among other things that the 50 per cent increase should be allowed by the Commission inasmuch as, in his opinion, conclusive evidence was presented to the Commission at the recent hearings. It is expected that experts of the Commission will now prepare a report on which the Commission will take final action. Indications seem to be that the report will favor the proposed increase.

Experts of the Chemical Division of the Tariff Commission have completed the domestic field work in connection with their survey of barium carbonate, cream of tartar, and tartaric acid. The foreign work on these surveys is in progress and nearing completion. Experts of the Chemical Division are also now engaged in looking up results in connection with the survey of sodium silico fluoride and a statement of information is being prepared.

HAMBURG MARKET WEAK

(*Special to* CHEMICAL MARKETS)

Hamburg, July 21 (By Radio)—Weakness has developed in several products, notably caustic soda, ammonium chloride, zinc chloride, and tartaric and citric acids. Increased strength is evidenced in potassium chlorate, glycerin, Epsom salts, Glauber's salts, prussiates and paraffin wax.

William J. Dodge Co., Peabody, Mass., manufacturers of oils and greases, announce that the Consumers Color & Chemical Co., of Chicago, has been appointed their western agents.

Donald B. Keyes, U. S. Industrial Alcohol Co., has become professor of industrial chemistry and head of industrial chemical division of Department of Chemistry at University of Illinois.

Allen Abrams, chemist for Cornell Wood Products Co., Cornell, Wis., for past five years, has become chief chemist for Marathon Paper Mills Co., Rothschild, Wis.

Chemical index number of wholesale prices for June is 118.7 against 117.5 for May and 124.8 for June, 1925, taking 1913 at 100, according to Department of Labor.

June Dye Imports Lowest Since January

Total 333,319 Lbs., Valued at $317,896, Against May Total of 392,739 Lbs., Valued at $343,745, and June 1925 Total of 376,668 Lbs., Valued at $333,654—Total for Six Months is 2,320,874 Lbs., Valued at $2,160,411, Against 2,503,151 Lbs., Valued at $2,320,844 for First Half of 1925—Germany Percentage Down, Switzerland Up

Imports of coal-tar dyes during June were the smallest of any month during the year with the exception of January. The total for the month was 333,319 lbs., valued at $317,896, against 392,739 lbs., valued at $343,745 for May, and 376,668 lbs., valued at $333,654 for June 1925. Total for the first six months of 1926 was 2,320,874 lbs., valued at $2,160,411, against 2,503,151 lbs., valued at $2,320,844 for first six months of 1925.

Imports for the first six months were as follows:

	1926		1925	
	Pounds	Inv. Val.	Pounds	Inv. Val.
January	190,456	$184,018	403,984	$359,376
February	479,027	477,255	373,259	365,268
March	487,804	435,891	527,964	488,501
April	437,526	401,606	451,005	426,141
May	392,739	343,745	370,271	347,904
June	333,319	317,896	376,668	333,654
Total, 6 months	2,320,874	$2,160,411	2,503,151	$2,320,844

Imports of coal-tar dyes for the month of June, 1926, by ports, are as follows:

	Pounds	Inv. Val.
New York	304,986	$294,731
Boston	21,897	15,579
Albany	6,436	7,586
Total	333,319	$317,896

The dyes in this report are grouped by Schultz numbers, and, in the case of those which could not be identified by this number, the classification according to the ordinary method of application was adopted. As the pastes and powders of the vat dyes vary widely in strength and quantity, each vat dye has been reduced—in nearly every case—to a single strength basis.

In this report the following abbreviations are used to designate the country of shipment in connection with the tabulated data: G for Germany; E for England; B for Belgium; S for Switzerland; F for France; I for Italy; C for Canada and H for Holland.

Five leading dyes, by quantity, imported during June, 1926.

Cross dye green B	19,446 pounds
Ciba scarlets (single strength)	13,365 pounds
Rhodamine 6 GDN extra (single strength)	10,715 pounds
Ciba red 3B (single strength)	8,212 pounds
Hydron printing black KD paste	7,500 pounds

Dyes and intermediates remaining in bonded Customs Warehouse

Date	Coal-tar dyes & colors	Coal-tar intermediates
July 31, 1925	775,916 pounds	1,378,837 pounds
August 31, 1925	767,431 pounds	1,363,760 pounds
September 30, 1925	709,381 pounds	1,359,717 pounds
October 31, 1925	609,750 pounds	1,055,241 pounds
November 30, 1925	521,238 pounds	746,226 pounds
December 31, 1925	633,525 pounds	758,618 pounds
January 31, 1926	703,159 pounds	763,409 pounds
February 28, 1926	596,154 pounds	855,170 pounds
March 31, 1926	447,588 pounds	896,530 pounds
April 30, 1926	359,164 pounds	928,593 pounds
May 31, 1926	535,226 pounds	946,120 pounds

Per cent of dyes by country of shipment, 1926.

Country	June	May	April	March
Germany	51.5	60	51.5	48
Switzerland	36	28	38	34
France	1	1	2	3
England	7.5	3	2	6
Belgium	3	5.5	3.5	4
Canada	0.5	0.5	1	2.5
Italy	0.5	1	2	2
Holland	—	1	—	0.5

KEY TO ABBREVIATIONS

1. The Six Leading German Companies

A. Actien Gesellschaft fur Anilin Fabrikation, Berlin, Founded 1873.

B. Badische Anilin-und-Soda Fabrik, Ludwigshafen on-the-Rhine, Founded 1865.

By. Farbenfabriken, normals Friedr. Bayer & Co., Leverkusen on-the-Rhine, Founded 1862.

C. Leopold Cassella & Co., Frankfort on-the-Main, Founded 1870.

K. Kalle & Co., A. G. Biebrich on-the-Rhine, Founded 1870.

M. Farwerke, vormals Meister Lucius & Bruning., Hochst on-the-Main, Founded 1862.

2. The Smaller German Companies

BK. Leipziger Anilinfabrik Beyer & Kegel. Furstenberg, near Leipzig, Founded 1882.

GG. Chemikalienwerk Griesheim G m. b. H., Offenbach-on-the-Main, Founded 1882.

CJ. Carl Jager G. m. b. H., Anilinfarbenfabrik, Dusseldorf, Founded 1823.

Gr-E Chemische Fabrik Griesheim-Electron, Offenbach-on-the-Main, Founded 1842.

L. Farbwerk Mulheim, vormals A. Leonhardt & Co., Mulheim-on-the-Main, Founded 1879.

tM. Chemische Fabriken vormals Weil ter Meer, Uerdingen-on-the-Rhine, Founded 1877.

WD. Wulfing, Dahl & Co, A. G. Barmen, Founded, 1842.

3. Swiss Companies, all at Basel.

DH. Farbwerke vormals L. Durand, Huguenin & Co., Founded 1871.

G. Anilinfarben-und Extract-Fabriken, vormals Joh. Rud. Geigy, Founded 1764.

(Continued on page 445)

[The Industry's Finances]

DAVISON ABSORBS ALLIANCE FERTILIZER CO.

Total of Four Companies Under Davison Control—Basis of Exchange of Stock for Various Companies Announced

Besides taking in Miller Fertilizer Co. of Baltimore, Eastern Cotton Oil Co. of Norfolk, Va., and E. H. & J. A. Meadows Co. of Newbern, N. C., manufacturers of fertilizer mixtures, Davison Chemical Corp. has also absorbed Alliance Fertilizer Co. of Alliance, O. These mergers will give the Davison Co. heretofore known as a producer of sulfuric acid and of acid phosphate only, not less than eight mixing plants, two of them in Baltimore, with an annual output of more than 200,000 tons, and will make it an important factor in the business. Consolidation is effected on the basis of an exchange of stock, with not more than 110 shares of Davison shares given for each 32 shares of Miller Company, not more than 83 shares of Davison stock for each 16 shares of Eastern Cotton Oil Company, not more than 25 shares of Davison for each 8 shares of Meadows Company, and not over 33 shares of Davison for each 32 shares of Alliance Company stock. Assuming that 75,000 shares of Davison Company stock will be exchanged for the shares of the several corporations taken in, the value of the stock at current market prices would be about $3,000,000.

American Trona Corp. and American Potash & Chemical Corp. certificate of consolidation was filed at the Delaware State Depatrment last week. The consolidated concern will bear the name of the American Potash & Chemical Corp. Officers named include L. A. G. Dru, chairman, New York; H. S. Emlaw, Forest Hills, N. Y.; F. C. Baker, New York, and John E. Teeple, Montclair, N. J., vice-presidents. No capitalization was stated in the certificate. The corporation has authorized 1,000,000 shares of no par value stock.

Swedish Match Trust has brought together several German competing companies in a company called the Deutsche Match Companies with a capital to be increased from 4,240,000 marks to 11,800,000 marks. Control of this company will be exercised by the Swedish Match through its Hamburg subsidiary. This is about the end of a long conflict where independent German companies attempted to keep control of the market, and to shut the Swedish company out.

Dewey & Almy Chemical Co., Cambridge, Mass., in its annual report shows a surplus on Dec. 31 last of $84,374. Accounts receivable were $70,883, notes receivable $2,283, cash $18,872, merchandise $80,842. Formulas and processes were valued at $60,000. Accounts payable were $48,602. Reserves were set forth at $73,203. Company is capitalized at $200,000.

Hathaway Oil Co., Inc., New Bedford, Mass., reports a surplus of $39,881 as of Dec. 31. Assets include accounts receivable $75,881, notes receivable $15,470, cash $22,-897 and good will $10,000. Accounts payable are shown as $62,-789, notes payable $47,000. Reserves are set forth at $37,200. Company is capitalized at $45,000.

By-Products Coke Corp. reports for the quarter ending June 30, net products of $407,106 before Federal taxes and before charging off $321,-915 which is written off for investments. Profits in previous quarter were $717,320, and for the half year $1,124,436.

Chemische Fabrik Gruenau vorm. Landshoff & Meyer A. G. of Berlin, Germany, passed dividends for 1925 on the common stock. Net earnings were only about $10,000.

Egyptian Portland Cement Co. 150,000 authorized no par common shares have been admitted to trading on New York Stock Exchange.

[Foreign Exchange]

	Par	Current
Great Britain (pound sterling)	4.866	4.862
France (franc)	.193	.025
Italy (lira)	.193	.034
Belgium (franc)	.198	.023
Czechoslovakia (crown) per 100.	20.30	2.96
Denmark (krone)	.268	.265
Germany (mark)	.238	.238
Holland (florin)	.402	.402
Poland (zloty)	.193	.120
Norway (krone)	.258	.219
Spain (peseta)	.193	.158
Sweden (krone)	.268	.268
Switzerland (franc)	.193	.194
Argentina (peso)	.414	.407
Brazil (milreis)	.324	.158
Japan (yen)	.499	.470
India (rupee)	.485	.363
China (Silver dollar Hongkong)	.789	.550
(Tael—Peking silver)	1.146	.750
(Tael—Shanghai, silver)	1.986	.720

CHROMIUM CORP. FORMED

Chromium Corp. of America has been formed to acquire patents on chromium plating developed by Chemical Treatment Co. and Chromium Products Corp., a subsidiary of Metal & Thermit Corp. John T. Pratt will continue as president of Chemical Treatment Co., and will also be chairman of the new corporation. Dr. F. H. Hirschland, president of Metal & Thermit Corp., will be president of the new corporation. Louis C. Owens, Jr., and Richard Loengard will be vice-presidents in charge of operations, and Dr. Erich A. Beck will be a vice-president. The new corporation will acquire and operate Chromium Products plant in Jersey City and the Chemical Treatment plants in New York and Waterbury.

Swift & Co. and National Leather Co., Boston, were cleared of complaint of Federal Trade Commission in the matter of lessening competition between Swift & Co., and England, Walton & Co. in the sale of leather by the respondent acquiring half of the capital stock of England, Walton & Co.

Warren Products Co., New York, bankrupt, creditors meeting will be held at 10:30 A. M., July 27, at the office of R. P. Stephenson, 32 Broadway, New York, for the purpose of proving claims, appointing a trustee, examine the bankrupt, and other business.

India Refining Co., McKean & Swanson sts., Philadelphia, have discontinued business. The real estate, buildings, stock and fixtures of the company will be sold at auction on the premises Tuesday, July 27, by Samuel T. Freeman & Co., auctioneers.

International Cement Corp. is offering stockholders of record July 27, the right to subscribe at $50 per share to 62,500 shares of common stock in the ratio of one new share for each eight shares now outstanding.

International Match Corp. will make no immediate offering of the new participating preference stock which was recently proposed to increase to 450,000 shares.

Richards Chemical Co. of Philadelphia, under authority of its Delaware charter has increased its capital stock from $50,000 to $1,-000,000.

German Solvay Works of Bernburg, Germany, declared an annual dividend of 8% on their stock for 1925.

NETHERLAND ORDERS NEW ISOPROPANOL TAX

(*Special to* CHEMICAL MARKETS)

Washington, D. C., July 21—A new tax on iso-propyl alcohol causing that type of alcohol to be placed in the same category as ethyl alcohol and which provides that the excise of 6.60 guilders per gallon levied henceforth and not be refunded upon its exportation, has been passed by the Netherlands Parliament.

The revenue tax was proposed some time ago in the Netherlands because of the increased consumption of isopropanol and because of the fact that it has been replacing ethyl alcohol to a large extent in the Netherlands. Its use was confined formerly to only a few chemical factories in that country, but recently it has gained a technical importance with a consequently increased local consumption. This kind of alcohol is now being manufactured abroad and is being placed on the market in a number of new countries.

Netherlands authorities say that, because of the agreeable odor of pure iso-proyl alcohol it is now being widely used as a substitute for ethyl alcohol in the preparation of hair tonics and pharmaceutical specialties. It is also being used to a large extent in the production of certain varnishes.

The bill on iso-propyl alcohol, according to Dutch authorities, was laid before the Second Chamber of the Netherlands Parliament in order to protect the Dutch Government from violation of the excise law on ethyl and other kinds of alcohol. As it is said to be very difficult indeed to separate iso-propyl alcohol from ethyl alcohol, the Government states that it feared that claims would be made for reimbursement of excise taxes upon exportation of merchandise containing ethyl alcohol whereas it would be very difficult to prove that ethyl alcohol was actually used in the preparation of the article instead of iso-propyl alcohol, which was free of excise. It is believed in the Netherlands that this regulation will raise the price of iso-propyl alcohol to such an extent that it will no longer be used as a substitute for ethyl alcohol on account of price.

Proctor K. Malin has resigned as president of Solvay Process Co. He will continue as president of Semet-Solvay Co. G. N. Wells will succeed him on the Solvay Process Board.

[*Stocks & Bonds*]

	1925		1926		Current		Ann.
	High	Low	High	Low	Bid	Asked	Div.
*Air Reduction	115	86½	119¼	107⅝	116	116½	5
*Allied Chem	115¾	80	140	106	129	126	4
*Allied Chem pfd	112¼	111	121⅞	118¾	121⅛	122	7
*Am Ag Chem	29⅞	13½	34⅜	17¼	18	18¾	
*Am Ag Chem pfd	82½	36½	96½	60½	61⅝	62	2
Am Can	...	...	58	38⅞	55⅛	55⅝	
Am Can pfd	121⅞	115	125½	121	125	125¼	
*Am. Cyan. 'A'	...	...	46	36⅞	41	46	
*Am. Cyan. "B"	...	...	47	35¼	39	43	
*Am Linseed	59¼	20	52⅞	28½	34	34⅛	
*Am Linseed pfd	89	53	87	75	77	79	
*Am Metals	57⅝	45¾	56⅝	47	54	54½	4
*Am Metals pfd	118	110	119	115	117	118	7
Am. Rayon Prod.	51⅞	26⅝	35¾	29¾	...	...	
Amer Smelting	114½	90⅜	144¾	112⅛	134⅞	135	7
*Am Smelting pfd	115¼	105½	117½	112⅞	118	118½	
*Am Zinc	12½	7⅞	12⅛	7⅛	7⅜	8	
*Am Zinc pfd	44⅞	24⅞	48⅛	26⅛	36	37	
Anglo Chil. Nitrate	101	97½	100⅛	95¼	...	...	
*Archer-Dan-Mid	46	26	44¾	36	38½	40	
*Archer-Dan-Mid pfd	105	90½	105	100	101½	105	
*Armour Del pf	100	90⅛	97⅞	93	93½	94	
*Atlas Powder	65	45	59	54	55	56½	4
*Atlas Powder pfd	94	90⅛	97⅞	96	95	98	
Brooklyn Un Gas	100¼	73⅛	78¾	68	83¾	84	4
By-Products Co.	...	...	...	...	60	...	
By-Products Co. pfd	...	...	...	...	109	111½	
*Calla L & Z	4⅜	1¼	2⅝	1½	1⅝	1⅞	
Canad. Ind.	20⅝	14	20	16¼	16⅞	...	
Canad. Salt	154½	140	145	131	105	115	
Casein Co	...	...	...	...	125	132	
Celluloid Corp	50¼	18⅝	26	15	19	21	
Celluloid Corp pfd.	97	65	68	55	68	70	
*Certainteed Prod	58¾	40¾	49½	37⅛	45	45½	
Charcoal Iron	35⅛	12⅞	33½	24	10	20	
Chesebro. Mfg. Co.	74⅝	48¼	72½	65	67	69	
Clark Co. Fred	5	2⅛	5	2¾	2½	4	
Cleve Cliff Iron	75	56	75	69½	70	75	
*Columb Carbon	62¾	40¾	69⅞	55⅝	62¼	62¾	
*Com Sol B	189	80¼	144⅞	118¼	166½	167½	
*Cont Can	93½	80	92½	70	79¾	80¼	5
*Cont. Can. pfd.	118	114	118⅞	117½	...	...	
*Corn Prod	42⅜	32⅜	43⅜	35⅝	43⅞	44	
*Corn Prod pf	127	118⅛	129⅛	122½	127	128½	7
*Davison Chem	40¾	27⅞	46¾	27⅛	37½	38	7
*Davison Chem. pf.	...	...	...	...	43⅛	43½	
*Devoe & Rayn A	90¼	52	103	33⅞	39⅛	40	
*Devoe & Rayn. B	...	...	101½	40	...	...	
*Du Pont deb	104¾	90	104½	101	105	105½	10
*Du Pont de Nem	271¼	113¼	238⅞	193⅛	254	257	10
*Eastman Kodak	118	104⅞	112⅜	106⅝	113½	114	
*Freeport Texas	24⅞	8	30½	19⅝	32⅜	32½	
*Gen Asphalt	70	42½	73	50	69	70	
*Gen Asphalt pfd	109	86½	118¾	94⅞	108	112	
*Glidden	26½	12½	25¾	18	16½	16¾	
*Gold Dust	51	37	56½	41½	46½	47	
Grasselli	133½	125	145	120	125	130	8
Grasselli pf.	106	101¾	103½	102	101	103	6
Hercules Powd.	140	105	152	140½	142	148	6
Hercules Powd pf	113½	104½	114⅜	110	112	114	7
*Household Prod	47⅛	34½	49⅜	40	13⅜	14	
Industrial Rayon	26⅞	17	19⅞	10½	...	...	
*Intl. Agri.	24⅛	7⅛	26¼	15¼	43½	43¾	
*Intl Agr. pfd	85	40	35	83½	81½	82	
*Int Nickel	48½	24¼	46½	32⅝	38½	39	2
*Intl. Salt	87⅛	67	84⅝	80	76	80⅛	6
Mac And. & Forbes	...	...	46¼	40	40½	41½	
*Mathieson Alk	107¼	51	106⅛	69⅞	81½	83	4
*Mathieson Alk pf.	100	97	100	100	...	...	
Merck & Co.,	...	...	...	...	54	56	
Merrimac	...	...	...	...	75	80	
*Natl Dist	43½	29⅝	34	18	18⅜	19	
*Natl Dist pf	81	52½	73⅛	57	44	45½	
*Natl Lead	174	138½	174¾	138	160½	162	
*Natl Lead pfd	118¾	114¾	117½	116	118½	119	
N J Zinc	214½	181	214½	180	203	206	
Niag. A. pf.	...	...	...	...	80	85	
*Owens Bottle	60⅜	42¾	68¼	53¾	72⅛	72¼	3
Penn Salt	...	...	...	...	71	...	
*Peoples Gas Chi	130	117	122¼	112	122	123	3
Proc. & Gam.	140	109	163	142½	157	...	
Shawinigan	175	130½	191	167½	170	...	
*Sherwin-Williams	43½	42½	108	107	106	...	
*St. Jos Lead	52½	36⅜	48⅛	37⅞	41¾	42	2
Silica Gel	35	11¼	21	11⅛	20	...	
Swan & Finch	27	12	21	18	19⅞	21	
Swan & Finch pf.	16	16	...	...	20	30	
*Swift & Co.	120	109	116	110	114½	...	
Tenn C & C	15¼	7⅝	16	10⅞	12	12¼	1
Texas Gulf & S	121½	97½	142	119½	83¾	84⅝	10
*Union Carbide	87	55	86½	73	83¾	84¾	
*United Dye pfd.	67	60	58	58	...	...	
Un Gas Imp	120½	79⅛	144⅛	84⅛	128	132½	
U. S. Gypsum	202	115	158	125	154	155½	8
U S Ind Al	97¼	72½	75½	45⅝	54¼	55	
*U S Ind Al pfd	115	102	104⅝	92⅝	101	102¼	
*Va Car 6% w 1	...	...	69	52¾	45	46	
*Va Car	...	...	25½	15⅝	14¼	14½	
Will & Baumer	...	...	...	...	16⅛	...	

*Listed on New York Stock Exchange

[Industrial Chemicals]

DENATURING METHANOL ADVANCED BY MAKERS

Decreased Stocks Bring Firmness—Copper Sulfate Remains Scarce at Firm Prices—Glycerin Holds at High Prices But Buying Shows Marked Decline—Few Large Buyers Cover for Next Two Months—Gray Ammonium Chloride Lower, White Weak—Barium Carbonate Steady at $48.00 Ton—Balance of Market Quite Steady

Advanced

Methanol Denaturing, 5c gal.
Methyl Acetone, 5c gal.

Declined

Ammonium Chloride, Imp. Gray, ½c lb.

	Trend of the Market					
	Today	Two Weeks Ago	Last Month	Last Year	War Peak	Pre-War
Acetic Acid, Glacial c-l ....lb.	$.11½	$.11½	$.11½	$.10	$.19½	$.07
Sulfuric Acid, Tanks 66° ..ton	15.00	15.00	14.00	14.00	55.00	20.00
Amm. Sulfate c-l NY ..100lbs.	2.40	2.45	2.60	2.75	7.50	2.65
Bleaching Powder, c-l ..100lbs.	2.00	2.00	2.00	1.90	9.50	1.50
Copper Sulfate c-l NY ..100lbs.	4.85	4.85	4.60	4.30	20.00	4.60
Potash, Caustic c-l Imp., ..lb.	.07⅛	.07⅛	.07⅛	.07⅛	.87	.08
Soda Ash, 58 p.c. c-l ..100lbs.	1.94	1.94	1.94	1.94	3.50	.60
Caustic Soda, 76 p.c. c-l 100lbs.	3.66	3.66	3.66	3.66	9.50	1.42
Potassium Bichromate .....lb.	.08¼	.08¼	.08¼	.08½	4.65	.06¼
Sodium Prussiate .....lb.	.10	.10	.10	.10½	1.25	.18
Average	3.022	3.017	3.017	2.902	10.79	2.99

Current Spot Quotations and Comments on Specific Items, Pages 450-462

Higher prices for denaturing grade methanol in all quarters, brought about by producers being in possession of greatly reduced stocks, featured the industrial chemical market during the past week. Copper sulfate remains very firm at unchanged prices and makers continue to report an actual scarcity of spot material and a very large part of their output is sold quite far ahead. Glycerin shows no appreciable change but buying has quieted down to a considerable extent and prices are no longer being bid up by consumers. Purchases were being made by some large consumers who are willing to cover their requirements for the next two months, but many are apparently holding off in anticipation of a downward turn feeling certain that prices cannot advance very much further.

The remainder of the industrial chemical market presents a quiet routine but firm front. Pronounced weakness is apparent in ammonium chloride and imported gray material is available on spot as low as 5¾c lb with imported white material none too steady at 5¼c lb. Barium carbonate is quiet but firm at recent reduction to $48.00 ton for carlots. Arsenic is in small demand at firm unchanged prices from importers and producers. Competition is sharp in sodium sulfide and disodium phosphate, but prices are being fairly well maintained. Some unsettlement has been apparent in carbon tetrachloride, but no definite change is reported.

Anhydrous ammonia remains firm under a good seasonal demand. Aqua continues weak with prices subject to shading in many instances. Chlorine and bleach are quiet but firm at unchanged prices.

Solvents show no definite change. Competition is sharp in several of them, particularly butyl acetate and various prices are quoted according to seller.

Lowry & Co., New York, in reference to the alcohol market say: "There has been no change in the alcohol market during the past week. The shading of prices in certain territories, which existed two weeks ago, still prevails; while in the middle and northwestern territories, the market has a firmer tone. The price shading which exists in Pittsburgh, Philadelphia and New York territories, we are in a position to state, emanates from one certain producer in Philadelphia, and another in New York. Price cutting on the part of these producers is doing a great deal of harm to the jobbers' business.

MAY METHANOL OUTPUT SMALLEST THIS YEAR

Washington, July 21—May production of crude methanol was the smallest monthly output this year, totalling 643,476 gallons, against 709,051 in April and 656,751 gallons in May, 1925. Both shipments and stocks increased during the month, totaling 629,671 and 1,442,842, respectively.

Production during the first five months totaled 3,409,057 gallons, against 3,256,309 in the first five months of 1925. Shipments during the same period totaled 3,198,520 gallons as compared to 3,051,428.

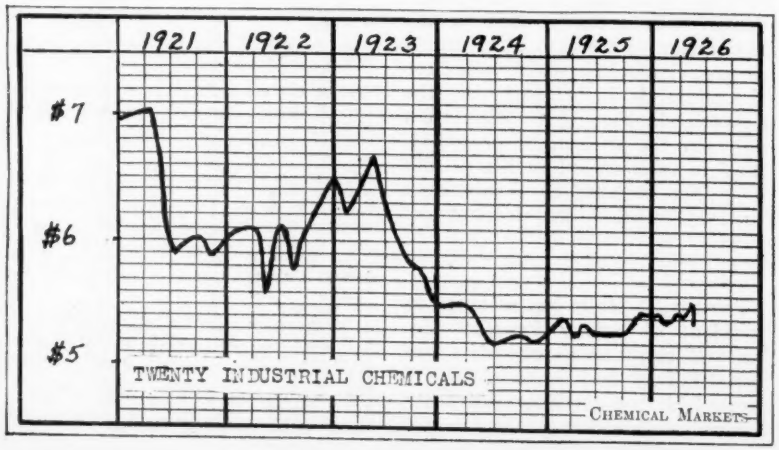
Canadian production, shipments and stocks of crude methanol increased slightly in May, totaling, respectively, 30,424, 35,791 and 42,046 gallons.

Output of acetate of lime in May, was 13,039,815 lbs., as compared to 13,283,704 lbs. in April and 12,801,579 lbs. in May 1925. Shipments and stocks increased to the highest point of the year, the former totaling 12,910,152 against 11,093,430 lbs. in April, and the latter 25,282,257 lbs., against 24,980,171 lbs. on April 30.

Canadian production totaled 683,197 lbs., a slight increase; shipments 467,325, as compared with 731,809 in April; and stocks 2,050,143 lbs., as compared to 1,804,137 lbs. at the end of April.

Canadian arsenic production revised statistics as reported by Dominion Bureau of Statistics show an output of 3,434,137 pounds in 1925, as compared with 4,621,567 in 1924.

Sulfuric acid export restriction to Mexico has been removed and collectors of customs are now being advised that this material may be exported to that country without license.



May Imports of Chemicals

Washington, July 21—Chemicals entered for consumption during May as complied by Department of Commerce, in line with its new service are as follows:

Commodity	Quantity	Unit	Value Dollars
CRUDE COAL-TAR PRODUCTS (Free)			
Dead oil	6,471,658	gal.	841,865
Pyridine	47,480	lbs.	21,928
Benzene	233,954	lbs.	6,073
Naphthalene	248,579	lbs.	10,793
Cresylic acid	683,985	lbs.	36,192
Crude coal, blast furnace, oil gas, & water gas tar	700	bbl.	3,662
Pitch of coal, blast furnace, oil gas, & water gas tar	466	bbl.	1,576
Acids (Dutiable)			
Citric acid	22,064	lbs.	6,147
Formic acid	258,489	lbs.	17,900
Oxalic acid	167,912	lbs.	7,532
Tartaric acid	101,153	lbs.	20,862
Acetic, not more 65%	582,309	lbs.	27,275
Acetic more than 65%	91,021	lbs.	10,931
Lactic, 30% to 55%. lactic acid	41,705	lbs.	3,017
Lactic, other, on which specific duty does not amount to 25%	5,058	lbs.	1,824
Phosphoric acid	36,822	lbs.	3,573
Tannic less than 50% tannic acid	220	lbs.	39
ACIDS AND ANHYDRIDES (Free)			
Arsenious acid	1,066,137	lbs.	39,035
Sulphuric acid	3,931,570	lbs.	30,883
Chromic, and anhydrides	1,609	lbs.	639
Nitric acid	1,808	lbs.	80
OTHER CHEMICALS (Free)			
Copper sulphate	109,210	lbs.	4,886
Iodine, crude	38,270	lbs.	136,106
Potassium cyanide	16,611	lbs.	6,247
Potassium nitrate, crude	3,532	tons.	196,496
Sodium cyanide	2,475,740	lbs.	192,606
Salt cake	775,796	lbs.	3,659
Calcium acetate crude	324,363	lbs.	9,401
Calcium chloride	2,223,599	lbs.	15,040
Ferrous sulphate	37,279	lbs.	998
OTHER CHEMICALS (Dutiable)			
Ammonium chloride, white	838,774	lbs.	32,427
Ammonium chloride, gray	67,197	lbs.	2,728
Ammonium nitrate	69,915	lbs.	32,919
Amm. carb. and bicarb.	36,054	lbs.	2,193
Ammonium phosphate	16,254	lbs.	1,678
Ammoniacal gas liquor	12,364	lbs.	445
Barium carbonate	2,722,145	lbs.	29,890
Barium chloride	516,048	lbs.	7,458
Barium hydroxide	22,180	lbs.	572
Barium nitrate	110,845	lbs.	4,482
Calcium carbide	930,414	lbs.	34,782
Hydrogen peroxide	57,114	lbs.	12,481
Ferric chloride	16,258	lbs.	443
Iron sulphide	2,200	lbs.	80
Lead acetate, white	11,033	lbs.	982
Cobalt oxide	18,200	lbs.	34,700
Bleach	186,380	lbs.	4,774
Citrate of lime	161,774	lbs.	19,327
Glycerine, crude	1,268,143	lbs.	167,823
Glycerine, ref.	312,399	lbs.	58,315
Magnesium, carbonate	26,057	lbs.	1,165
Magnesium chloride	741,686	lbs.	4,882
Magnesium oxide	9,554	lbs.	2,046
Magnesium sulphate	747,410	lbs.	4,570
Magnesium silicofluoride	2,646	lbs.	168
Potassium carbonate	1,272,033	lbs.	59,513
Caustic potash	1,362,880	lbs.	81,384
Potassium bitartrate, crude	1,955,714	lbs.	126,896
Cream of tartar	39,983	lbs.	6,048
Potassium chlorate	1,459,627	lbs.	51,411
Potassium perchlorate	71,656	lbs.	3,941
Potassium bicarbonate	12,033	lbs.	1,302
Potassium bromide	10	lbs.	5
Potassium chromate and dichromate	480	lbs.	110
Potassium ferrocyanide	11,343	lbs.	1,516
Potassium ferricyanide.	9,638	lbs.	2,710
Potassium nitrate,	664,063	lbs.	30,000
Potassium permanganate	15,609	lbs.	1,645
Sodium ferrocyanide	108,669	lbs.	7,754
Sodium nitrite	247,754	lbs.	8,933
Sodium acetate	45,499	lbs.	1,578
Sodium arsenate	89,984	lbs.	5,684
Sodium bicarbonate	934	lbs.	81
Sodium bisulphite	136,812	lbs.	3,458
Sodium bromide	6,504	lbs.	2,021
Sodium carbonate, cal.	5,178	lbs.	341
Sodium chlorate	339,508	lbs.	11,932
Sodium fluoride	101,954	lbs.	7,084
Sal soda	13,440	lbs.	422
Caustic soda	1,103	lbs.	166
Sodium hydrosulphite and compounds	43,392	lbs.	10,885
Sodium phosphate	760,257	lbs.	17,330
Sodium silicofluoride	122,773	lbs.	4,228
Sod'm and pot. tartrate	22,201	lbs.	2,338
Sodium sulphate, anhy	121	tons	3,801
Sodium sulphate, cryst.	131	tons	1,430
Sodium sulphide under 35%	11,195	lbs.	177
Sod. sulphide, over 35%	619,447	lbs.	14,031
Sodium sulphite	50,716	lbs.	1,901
Sodium sulphydrate	4,739,433	lbs.	116,646
Acetone, acetone oil, and ethyl methyl ketone	7,460	lbs.	1,033
Aldehyde ammonia	110	lbs.	21
Formaldehyde	264	lbs.	420
Paracetaldehyde	3,225	lbs.	689
Potass Aluminum sulfate	252,033	lbs.	3,750
Aluminum sulphate, Iron free	121,886	lbs.	1,714
Amm. aluminum sulfate	45,318	lbs.	839
Antimony oxide	436,800	lbs.	60,540
Artimony sulphides, red and golden	128,269	lbs.	8,570
Antimony salts and compounds other	1,605	lbs.	341
Bromine compounds,	66,296	lbs.	25,597
Carbon tetrachloride	50	lbs.	19
Cobalt sulphate	2,550	lbs.	1,543
Copper oxide and suboxide	41,465	lbs.	7,726
Diethyl sulphate	36	lbs.	23
Ethylene dichloride	55	lbs.	8
Lead nitrate	12	lbs.	3
Manganese borate	4,256	lbs.	263
Manganese sulphate	50	lbs.	11
Paris green and London purple	2,520	lbs.	609
Phosphorus	8,053	lbs.	1,804
Tetrachlorcethane	5,276	lbs.	284
Urea	57,495	lbs.	5,351
Zinc chloride	83,044	lbs.	3,874
Zinc sulphate	2,525	lbs.	111
Zinc sulphide	1,029	lbs.	569
PIGMENTS, PAINTS AND VARNISHES (Dutiable)			
Lithopone	1,627,808	lbs.	66,161
Litharge	22	lbs.	3
Orange mineral	5,247	lbs.	457
Sublimed lead	266	lbs.	30
White lead	59,379	lbs.	5,945
Blanc fixe	239,550	lbs.	5,720
Chrome colors	31,037	lbs.	6,934
FERTILIZER AND FERTILIZER MATERIALS (Free)			
Calcium cyanimid	1,813	tons	98,324
Calcium nitrate	1,400	tons	52,978
Sodium nitrate	58,082	tons	2,844,956
Guano	50	tons	1,639
Dried blood	317	tons	17,781
Tankage	555	tons	21,292
Amm. sulphate nitrate.	150	tons	10,600
Other nitrogenous material	1,232	tons	21,566
Bone phosphates	1,537	tons	42,930
Phosphate rock, crude.	21	tons	389
Other phosphate materials, crude	413	tons	7,868
Pot. chloride, crude	7,596	tons	237,437
Pot. sulphate, crude	1,019	tons	42,852
Kainite	5,583	tons	45,027
Manure salts	10,261	tons	120,696
Prepared fertilizers	200	tons	6,204
FERTILIZERS (Dutiable)			
Sulphate of Ammonia	1,137	tons	61,395
NONMETALLIC MINERALS (Free)			
Pyrites	63,351	tons	121,904
Sulphur and sulphur ore	22	tons	477
Sulphur in other forms	45,103	lbs.	3,965
VEGETABLE OILS (Free)			
Chinawood oil	2,641,205	lbs.	269,394
VEGETABLE OILS (Dutiable)			
Linseed oil	622,597	lbs.	43,725
ALCOHOL (Dutiable)			
Fusel oil	932	lbs.	264
Methanol	55,079	gal.	25,339
DYEING AND TANNING MATERIALS, NOT CONTAINING ALCOHOL (Free)			
Logwood	2,784	tons	57,129
Nutgalls and gall nuts	342,505	lbs.	34,799
Turmeric	123,561	lbs.	6,628
Crudes for dyeing. N. s. p. f.	518,452	lbs.	3,627
EXTRACTS FOR DYEING, COLORING OR STAINING (Dutiable)			
Chlorophyll	230	lbs.	641
Logwood	628,686	lbs.	53,810

Denatured Alcohol

ALL FORMULAS

Fillers

WHITING — XXX, Superfine, 313, Caltex.

MAGNESIA — Carbonate, Oxide, Technical & U.S.P., Light & Heavy.

Phenol

Congealing Point 40° C Minimum

Ice Crystals, U. S. P.

New York Stocks

Wood Chemicals

Acetate of Lime
Methanol
Acetone
Formaldehyde

WM. S. GRAY & CO.
342 Madison Avenue
New York City
Tel. Vanderbilt 0500

[Crudes & Intermediates]

PHENOL DOWN AGAIN; NAPHTHALENE LOWER

Phenol Suffers Another Reduction of 2c Lb. and is Quoted at 18c Lb.—Naphthalene Offered at 5c For Flake, and 6c Lb. for Balls—Cresylic Acid Quiet But Steady—Pyridine Remains Dull—Light Oils Unchanged With Benzene, Solvent Naphtha, Toluene and Xylene Easy

Advanced
No Advance

Declined
Naphthalene, ¼c lb.
Phenol, 2c lb.

	Trend of the Market					
	Today	Two Weeks Ago	Last Month	Last Year	War Peak	Pre-War
Benzene, pure tanks wks ..gal.	.25	.25	.25	.25	1.10	.25
Naphthalene flake .....lb.	.05	.05¼	.05¼	.05	.16	.03
Phenol Spot .....lb.	.18	.22	.22	.24	1.50	.08
Toluene tanks, wks., ...gal.	.35	.35	.35	.26	—	—
Aniline Oil le-l	.15	.15	.16	.16	1.40	.10½
Alpha-naphthylamine .....lb.	35	.35	.35	.35	1.28	—
Benzaldehyde .....lb.	.70	.70	.70	.70	—	—
Betanaphthol bbls .....lb.	.24	.24	.24	.24	1.50	.08
Dimethylaniline e-l .....lb.	.30	.30	.30	.32	1.30	—
Paranitroaniline bbls .....lb.	.45	.45	.45	.58	1.58	.18
Average	.302	.306	0.308	0.315		

Current Spot Quotations and Comments on Specific Items, Pafes 460-462

Weakness in phenol with prices showing another reduction of 2c lb during the past week, following the reduction of 2c lb the previous week, featured the market. Sharp selling competition brought about by large stocks in hands of some makers with no more than a small routine demand in evidence, was the cause. Price competition is reported to have originated from a consuming producer. Naphthalene is likewise weak due to the season having past and prices are lower due to burdensome stocks in some directions. Cresylic acid is quiet but prices are quite steady with most importers. Pyridine remains very quiet with holders of stocks naming unchanged prices and demand at a standstill due to the unsettled condition of the denatured alcohol market.

Light oil distillates are moving at unchanged prices. Benzene is fairly steady but the market is easy. Motor fuel blenders are reported not to be taking in as large quantities as usual for this time of the year and production is being maintained at large volume. Solvent naphtha is steady but supplies are available for prompt and this market is likewise easy. The same can be said for commercial and 5° xylene. Toluene demand has increased but supplies are readily available. Quotations are unchanged.

Intermediates remain generally unsettled. Open quotations show no variation in any direction but large business on the majority of products makes its own price. Aniline oil and dimethylaniline rule at firm unchanged prices. Competition is exceedingly sharp in gamma acid, N & W acid, H acid, sodium benzoate, and para-nitroaniline. The latter product is quoted at unchanged prices of 44c@45c lb as to quantity. Demand is of small routine character with large makers of both dyes and intermediates obtaining increasing dye business with the result that smaller dye makers are not operating at usual capacity and consequently are buying lessened amounts of intermediates.

To secure for our readers authoritative first-hand information, our Mr. D. O. Haynes, Jr., sailed last Saturday for Europe. He will make personal contact with our various correspondents abroad, with the object of improving our foreign news service, and will visit the more important chemical, dye, and oil producing centers of Europe.

BELGIAN CREOSOTE OIL

Washington, D. C., July 21—Belgian production of creosote oil amounts to approximately 60,000 metric tons, of which 10,000 tons are consumed by domestic wood-preserving plants. The remaining quantity is exported largely to the United States.

The three largest producers of creasote oil in Belgium are apparently the Semet-Solvay & Piette Co., Brussels; Evans Coppee & Co., Brussels, and Burt, Boulton and Haywood, Ltd., Selzaete.

The tables show Belgian exports and imports of coal-tar distillation products, which include light oils in raw state, and all the derivatives and residues of tar, creosote oil constituting the major part of the latter:

IMPORTS

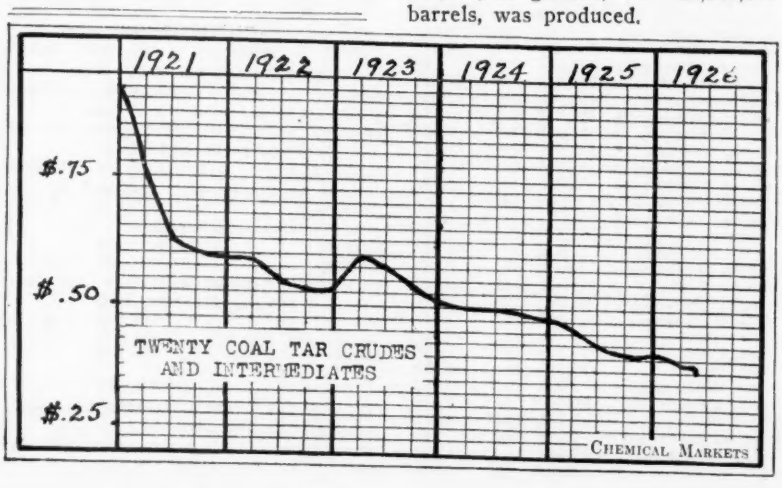
Country	Kilos	Francs
Germany	9,134,406	4,750,510
France	868,444	654,570
Great Britain	90 115	300,662
Netherlands	3,631,067	1,760,775
Total	13,872,380	7,786 201

EXPORTS

Belgian Congo	34.297	69,143
Germany	84,410	131,568
United States 49	800,553	30,804,585
France	422,443	354,043
Great Britain	2,667,051	1,275,720
Morocco	30,076	43 100
Netherlands	153,141	114,984
Total	53,478,311	34,444,249

According to declared export figures of the American Consulate General at Antwerp, Belgium, Belgian exports of creosote oil to the United States in 1925 were valued at $2,112,196.

Gasoline production in the United States during May reached the billion-gallon mark for the first time in history and for the first time during 1926 the output of crude petroleum in May passed the 2,000,000-barrel-a-day mark. The record figure for gasoline production, established in April of this year, was broken in May when 1,029,375,000 gallons, or 24,509,000 barrels, was produced.



DU PONT OFFERS TWO NEW FAST DYESTUFFS

E. I. du Pont de Nemours & Co. announce Ponsol Red BN Double Paste, a new vat dyestuff. Heretofore there was no red dye in the Ponsol group. This color is expected to find wide use not only as a red and as a pink, but in combinations with other Ponsol dyes both for delicate mode shades and full shades. It is exceptionally fast to light even in lightest shades, and very fast to water, perspiration, acids and alkalies. It possesses good resistance to chlorine. It is very level dyeing, penetrates well and is suitable for piece dyeings. Its chief use is on cotton, for such materials as dress goods, draperies and the like, and other materials that must stand long exposure to light, or repeated washings, or both.

The company also announces a direct dye, Pontamine Fast Yellow B. The chief characteristic of this color are its level dyeing properties, good fastness to light and washing and fastness to chlorine. It is also fast to acids and alkalies. Its main application is for dyeing tans, browns, olives and similar shades on cotton piece goods, either in the padder or on the jig in combination with other direct colors. It shows very good solubility and can be used in circulating machines. It leaves Celanese unstained.

DYE IMPORTS

(Continued from page 439)

I. Gelsellschaft for Chemische Industrie, Founded 1885.

S. Chemische Fabrik, vormals Sandoz & Co. Founded, 1887.

4. Dutch and French Companies.

NF. Niederlandische Farben-und-Chemikalienfabrik Delft, Delft, Netherlands, Founded 1897.

CNI. Compagnie Nationale des Matieres Colorantes et Produits Chimiques, Founded 1917.

FA. Farbwerk Ammersfoort, Ammersfoort, Netherlands, Founded, 1888.

P. Societe Anonyme des Matieres Colorantes et Produits Chimiques St. Denis. (formerly A. Poirier). Founded 1830.

5. English Companies

Bro. Brotherton & Co., (Ltd.) City Chambers, Leeds.

BAC. British Alizarine Co., (Ltd.), Manchester.

BD. British Dyestuffs Corporation (Ltd.) London

CI Co. The Clayton Aniline Co., (Ltd.) Clayton, Manchester.

Scot. Scottish Dyes (Ltd.), Grangemouth.

CV. The Colne Vale Dye and Chemical Co. (Ltd.), Milnsbridge, Huddersfield.

Hol. L. B. Holliday & Co. (Ltd.) Grangemouth 1Etablissements Kuhlman merged with

DYES OF COAL-TAR ORIGIN

Schultz No.	Dye and Maker	Pounds
36	Moti orange R—t-M	200
58	Chrome orange R—DH	110
83	Ponceau 3 R—IG	50
	Metachrome olive brown G—Bro.	1,000
126	Blue J. (Janus blue G)—IG	50
154	Pilatus chrome brown RX—IG	1,500
159	Acid alizarin black R—IG	500
	Metachrome violet B—IG	500
175	Acid ponceau E—G	220
256	Sulphon cyanine G—IG	500
265	Acid milling black B—G	2,205
274	Diazo fast black MG—IG	485
	Benzo fast heliotrope BL—By	447
	Diazo brilliant orange GR extra—IG	1,000
	Diazo brilliant scarlet ROA extra—IG	
296	Cotton yellow G extra—IG	100
300	Brilliant carmine L conc—B	200
	Diphenyl fast gray BC—G	331
339	Diamine orange B—C	694
358	Chloramine brilliant red 8B conc—S.	1,998
358	Chloramine red 8 BS—By	
	Acid Milling red G. conc.—G	223
364	Diazo brilliant black B—IG	882
373	Congo orange R—IG	500
400	Acid milling red R. Conc.—G	1,658
404	Diamoine yellow N—C	273
404	Diamine brilliant Bordeaux R—IG	100
476	Benzo chrome brown G—IG	100
206	Diphenyl catechine G supra—G	4,409
207	Diphenyl fast brown GF—G	441
496	Setoglaucine—G	551
500	Setocyanine—G	1,000
503	Poseidon green SGX—IG	941
503	Erioviridine B supra—G	
506	Erioglaucine AP—G	6,102
506	Erioglaucine EP—G	
507	Xylene blue VS conc.—S	1,000
515	Methyl violet NFB—IG	2,000
516	Crystal violet extra—IG	500
531	Eriocyanine AC—G	2,205
533	Acid violet 7 BN—IG	50
537	Methyl silk blue new—G	110
543	Brilliant acid blue V—By	1,200
543	Patent blue V—IG	
545	Kiton blue A—I	1,371
545	Neptune blue BR Conc.—IG	
545	Patent blue A—M	
545	Poseidon blue BXX—IG	
546	Blue extra—IG	500
551	Eriochrome azurol BC—G	2,205
553	Eriochrome cyanine RC—G	1,102
554	Chrome azurol S. conc.—G	1,102
557	Chrome violet—G	110
559	Victoria blue B base—IG	1,257
559	Victoria pure blue BO—IG	
559	Victoria pure blue BO—By	
564	Naphthalene green conc—IG	100
565	Wool blue G—extra—IG	100
579	Sulpho rosazeine B extra—IG	200
573	Rhodamine B conc. (SS)—G	4,625
573	Rhodamine B extra (SS)—B	
573	Rhodamine B extra (SS)—IG	
	Chromorhodine BN—DH	441
	Auracine G—G	200
603	Rhoduline orange NO—By	337
	Patent phosphine G—I	3,526
	Patent phosphine M—I	3,526
606	Phosphine 3 R—IG	2,000
	Wool fast blue BL—By	5,247
	Wool fast blue GL—By	
	Xylene milling blue AE conc.—S.	
	Xylene milling blue BL conc.—S	
687	Methylene heliotrope extra strong—IG	250
690	Diphene blue B—IG	3,700
700	Silver gray P—IG	25
681	New fast gray—By	100
923	Fur blue black A—IG	720
923	Fur brown 4R paste—IG	
923	Fur brown SK—IG	
923	Fur gray ALA—IG	
	Chromazurine G—I	1,102
625	Gallo heliotrope BD pdr.—IG	100
627	Chromacetine blue S extra—DH	440
635	Modern violet—DH	1,823
635	Ultra violet MO—S	
637	Gallamine blue extra paste—G	4,894
637	Fast green G—IG	100
645	Gallazine No. 90—DH	441
653	Danubia blue BX—IG	500
654	Danubia blue BBX—IG	50
922	Diphenyl black base I—IG	500
660	Methylene green G extra—S	500
663	New Methylene blue N—IG	1,000
667	Indochromine RR conc.—S	500
746	Pyrogene green 3 G—I	661
778	Alizarin red VI old paste—IG	441
780	Alizarin red S pdr.—B	440
782	Anthracene brown R pdr.—IG	300
784	Alizarin red SX paste—IG	2,095
	Alizarin blue WS—By	1,487
	Alizarin light blue SE conc.—S	
	Alizarin sapphire blue SE—I	
858	Alizarin light blue B—S	3,440
858	Alizarin sapphire blue B—I	
	Alizarin cyclamine R paste—IG	800
804	Alizarin blue S pdr.—IG	1,005
807	Alizarin black S paste—IG	931
808	Alizarin green S paste—B	435
852	Alizarin irisol R—IG	623
856	Alizarin blue AS—By	1,701
856	Alizarin astrol B—IG	
865	Alizarin cyanine green G ex pdr.—IG	2,374
865	Alizarin cyanine green G ex pdr.—By	
854	Alizarin viridine FF pdr.—IG	50
855	Alizarin sky blue—IG	890
855	Alizarin sky blue B—IG	
855	Alizarin blue SKY—By	
861	Anthraquinone blue SR pdr.—IG	200
861	Alizarin rubine GW—By	882
861	Alizarin rubine R—By	
850	Vat blue W. B. pdr.—B	1,029
759	Vat yellow G. C. pdr. (SS)—B	896
760	Vat golden orange G dbl paste (SS)—IG	4,930
761	Vat orange RRT paste—IG	7,305
761	Vat orange RRT paste fine—IG	
763	Vat dark blue BOA paste fine—IG	2,420
767	Vat brilliant violet RRP pdr.—B	331
839	Vat blue RK paste—By	399
842	Vat blue GCD dbl paste fine (SS)—IG	4,004
	Vat blue BCS pdr. (SS)—B	825
849	Vat yellow G dbl paste fine (SS)—IG	4,982
827	Anthra Bordeaux R paste—IG	2,447
827	Anthra Bordeaux R paste fine—B	
834	Vat gray GK paste—IG	800
833	Vat olive R paste—IG	5,200
833	Vat olive R pdr. (SS)—IG	
	Indanthrene brown R paste—By	1,995
	Vat brown G paste—IG	6,010
	Vat brown G pdr. (SS)—IG	
793	Cibanone blue 3 G paste—I	2,204
880	Indigo BASFIRB pure paste—IG	200
881	Brilliant indigo 4B paste fine—IG	5,140
885	Brilliant indigo B paste—IG	2,530
912	Anthra red B paste—IG	492
917	Helindone red B pdr. (SS)—IG	250
910	Vat rose AN paste—M	1,323
910	Vat rose BN paste—M	
918	Ciba red 3 B pdr. (SS)—I	8,212
918	Thioindigo red 3 B paste—KK	
918	Vat red violet RH paste fine—IG	
907	Anthra scarlet 2 G paste fine—IG	13,365
907	Anthra scarlet 2 G powder (SS)—B	
907	Ciba scarlet G extra paste—I	
907	Thioindigo scarlet 2G paste—K	
908	Ciba red R paste—I	6,392

UNIDENTIFIED DYES

Acid Dyes

Dye and Maker	Pounds
Acid pure blue R Supra—G	1,102
Acid rhodamine BG—IG	250
Alizarin direct blue BB powder—IG	20
Alizarin irisol B pdr.—By	50
Alizarin levelling blue CA—C	100
Alizarin supra blue A—IG	600
Alkali fast green 10G—IG	500
Astra phloxine FF extra—IG	2,000
Brilliant acid blue EG—By	500
Brilliant wool blue FFR extra—By	1,000
Fast acid green BB extra—IG	500
Fast cyanine blue B—I	110
Fast cyanine violet B—I	110
Guinea fast green B—IG	900
Indocyanine B—IG	7,198
Indocyanine B—A	
Indocyanine BF—IG	200
Kiton fast red 4BL—I	331
Milling yellow O—IG	500
Neolan blue G—I	551
Neolan green B—I	2,204
Neolan pink B—I	7,164
Neolan pink G—I	2,756
Neolan yellow G—I	5,512
Neolan yellow GR—I	5,511
Neotolyl black TL extra—IG	25
Novazol blue B—G	441
Novazol violet B—G	441
Onis (anthosine) B—IG	100
Onis (anthosine) 3B—IG	200
Polar orange R conc.—G	1,102
Sulphon orange G—By	572
Sulphon yellow 5G—By	400
Supramine brown G—IG	100
Wool black GRF—IG	500
Wool blue N extra pdr.—By	255
Wool blue RR extra pdr.—By	660
Wool fast yellow 5G—By	92
Xylene fast blue FF conc.—S	2,759

Vat Dyes

Ciba pink BG pdr. (SS)—I	1,655
Cibanone red G pdr.—I	551
Grelanone olive B pdr.—Gr-E	40
Helindone blue 3G pdr.—IG	50
Helindone fast scarlet G paste—IG	1,500
Helindone printing black RD paste—IG	7,500
Hydron brown R paste—C	146
Hydron pink FB paste—C	833
Hydron scarlet 2B paste—C	285
Hydron scarlet 3B paste—C	389
Hydron yellow GG Pdr.—IG	100
Indanthrene brown GG paste—By	1,197
Indanthrene brown GG pdr. (SS)—IG	
Indigosol black TB—DH	55
Indigosol pink HR extra—DH	22

(Continued on page 481)

[Oils and Fats]

LINSEED AND COTTONSEED OILS HIGHER ALL POSITIONS

Linseed Continues Upward Movement on Better Inquiry—Bullish Census Report Checks Easy Trend of Cottonseed—Corn and Coconut Oils Quiet and Easy—Tallow and Greases in Good Demand—Red Oil and Stearic Acid Unchanged

Advanced	Declined
Cottonseed Oil, spot ¼c lb.	Coconut Oil, Ceylon, ½c lb.
Linseed Oil, July-Aug. 0.4c lb.	Greases, white, ½c lb.
Grease, house, ½c lb.	Lard Oil, edib. ⅝c lb.
Grease, brown, ¼c lb.	Lard Oil, prime ⅝c lb.
Tallow, extra loose ¼c lb.	Oleo Oil, No. 1 1c lb.
	Olive Oil Foots, ½c lb.
	Palm Kernel, ¼c lb.
	Stearine Oleo, ½c lb.

	Trend of the Market					
	Today	Two Weeks Ago	Last Month	Last Year	War Peak	Pre-War
Cod Oil NY .....gal.	.60	.60	.60	.62	1.26	.26½
Degras American, bbl. .....lb.	.04¾	.04¾	.04¼	.04¼	.23	.03½
Lard No. 1 .....gal.	.85⅝	.85⅝	.85¼	.85⅝	2.90	.92
Menhaden, crude tanks .....gal.	.47½	.47½	.47½	.55	1.20	.33
Neatsfoot 20° ct .....gal.	1.31¼	1.31¼	1.34	1.22½	8.45	.95
Red Oil distilled .....lb.	.10	.10	.10	.13	.17	.07
Stearic Acid, T.P. .....lb.	.16½	.16½	.16¼	.16⅜	.38	.12
Coconut Ceylon tanks .....lb.	.11½	.11½	.11½	.10¼	.30	.14
Cottonseed crude tanks .....lb.	.14	.14	.14	.09½	.25	.08
Linseed Crude c-l bbls ....gal.	.90	.85½	.80	1.08	1.85	.57
Olive, denatured .....gal.	1.15	1.15	1.15	1.15	4.50	1.05
Peanut, refined .....lb.	.16½	.16½	.15	.15	.30	.08
Soya Bean bbls .....lb.	.13½	.13½	.12¼	.13	.19¼	.07
Average	4.70	4.70	4.69	4.84	5.92	1.56

Current Spot Quotations and Comments on Specific Items, page 462

In contrast to its activity of the past few months, the oil market is passing through a comparatively quiet and featureless period. Consuming demand has slowed down and a general easy tone is apparent.

Linseed oil is the principal exception to this condition as it is again quoted higher this week. It has had a firm undertone for some time past and bullish flaxseed reports followed by an increased demand for consumption have served to further advance the spot and future prices. A bullish census report issued last Saturday on cottonseed oil consumption forced an advance in prices for all positions. On a quiet market cottonseed had been easing off a bit each day over the past two weeks, but the release of the report immediately stiffened the market. Coconut oil is easier on a light inquiry at New York and on the Pacific coast. Chinawood oil is also somewhat easier for futures with spot offerings maintaining their former levels with the market none too strong. Corn oil is practically unchanged in all positions with a possibility of shading the quoted price on crude oil at the mills. In most quarters, however, the price is well maintained.

Fish oils are in rather a better position with small offerings heard for Newfoundland cod and weather conditions unfavorable to a large crop of menhaden oil. Factors in these items report a smaller inquiry this week but at the same time stating that the market is firm. Tallow, greases and oleo oil, while showing generally lower prices than two weeks ago are moving into consumption at a better rate this week and some slight advances are apparent at this time. Red oil and stearic acid are unchanged with reports of a shade lower being done on double pressed stearic.

Woburn Degreasing Co., Peabody, Mass., is running at full capacity, which, when it is realized that this is the largest degreasing plant in existence, having a capacity of 10,000 sides a day, it is evident that the leather business is not as near a standstill as some recent reports would lead one to believe.

HULL OIL MARKETS

(*Special to* CHEMICAL MARKETS)

Hull, England, July 7—Linseed is quiet, inactive. Plate: Spot to July-Aug. £16 2s 6d, Aug.-Sept. £16 5s, Sept.-Oct. £16 6s 3d. Calcutta: Spot to July-Aug. £18 10s. Bombay: Spot to July-Aug. £18 15s. Arrivals are 3,200 tons River Plate, 300 tons Bombay—total 3,500 tons.

Cottonseed presents a very slow market, with rather low prices. Black: Spot £9 15s, July-Aug. £9 15s, July-Aug., £9 16s 3d. Sakellaredes: Spot £9 5s, July-Aug. £9 5s sellers. Bombay remains unworkable. Spot £8 2s 6d. June-July and July-Aug. £8 2s 6d sellers.

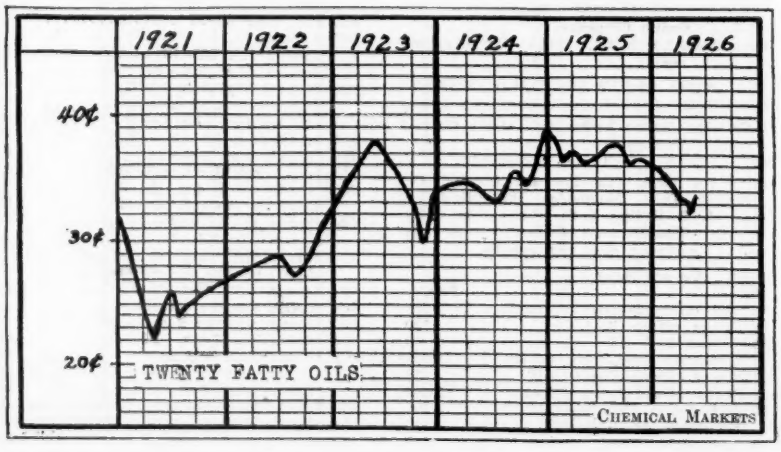
Linseed oil has shown no special feature to report during the past week and prices remain unchanged. Spot to December 33s 9d; Jan.-April 34s.

Cotton oil is getting small interest and very little business is passing. Egyptian crude 39s 6d. Edible 44s, Bombay 36s 9d; soap, refined 40s 9d.

Linseed, cotton and soya oils exports for the week ending June 29, 1926, were: Linseed oil: Australia, 50 tons, India, 74 tons, Norway, 1 ton—total 125 tons; cotton oil: Australia, 6 tons, Denmark, 9 tons, Holland, 20 tons—total 35 tons; soya oil: Australia 9 tons, Belgium 80 tons, Holland 13 tons —total 102 tons.

Wyandotte Worsted Co. plant at Rochester, N. H., formerly operated by Old Colony Woolen Mills, has started operations. The mill has been remodeled and new equipment has been installed.

Penobscot Chemical Fibre Co. has placed a contract for extensive improvements both to the soda and pulp mill and the bleached sulfite mill at Great Works, Me.



SPAIN ISSUES OLIVE OIL PROTECTION LAW

Washington, D. C., July 21 — Protection has been extended to the Spanish olive oil industry by a recent Royal decree-law, according to a report from Madrid.

The law includes the following provisions: Import prohibition on (item 999-2) peanuts, colza seed, sesame seed and soya beans; and (item 801-a) non-siccative liquid vegetable oils used for food purposes; importation of cotton seed permitted only by State Cotton Commission for planting; prohibition against the adulteration or coloring of olive oil, the term "olive oil" or "edible oil" to be used only for pure olive oil; labeling of containers of olive oil to show its purity; and all cottonseed oil to be denatured in Spanish factories before its use is permitted.

Protests filed by Adolph Hurst & Co., Alex Murphy & Co., and F. C. Gerlach, of New York, against the collector's assessment of duty on certain merchandise described as shellac gum resin, and as shellac, are sustained in a ruling just handed down by Judge Young of the Customs Court. On entry duty was taken at 20 per cent ad valorem under paragraph 1459, act of 1922, as a non-enumerated manufactured article. The importers claimed free entry under paragraph 1584 or under paragraph 1604 of the same act, and this claim is granted by the court.

North Pacific Sea Products Co. has opened a new whaling station at Point Hobron, on Kodiak Island, Alaska, where one hundred and fifteen men are employed.

Palmetto Products Co., Delray, Fla., will erect a new plant at Orlando, Fla., to cost $75,000. It is purposed to remove the present work to this location.

NITRATE REPORT SHOWS SULFATE COMPETITION

(Continued from page 437)

their production, and during the coming year, with a larger nominal productive capacity (owing to the opening of new oficinas) estimated at 5¼ million tons and a certain reduction in sales owing to stocks carried forward in consuming markets, allocations are unlikely to exceed a maximum of 27½ per cent of quotas. As a result several oficinas have already ceased working, and it is evident that before the end of the year many more will have had to close down.

Sulfate of ammonia price in United Kingdom during the year was fixed at £12 5s for July, rising to £13 1s for season delivery and in Germany at £9 10s, rising to £11 2s 6d, while in France, values in sterling have varied from £10 15s to £9 per ton. Over two-thirds of French supplies were received from Germany in the form of reparations, and the low price at which these have been sold has represented a subsidy from the French Government of from £1 to £3 per ton, which is in addition to 20,000,000 francs distributed as a direct subsidy to agricultural buyers of sulfate of ammonia. In other parts of the Continent values ruled about £11 to £11 10s for July, 1925, rising to £12 5s to £13 for season delivery. Prices for the coming year, which show a reduction of from 4 to 9 per cent, are quoted as follows: Germany: For inland consumption, equivalent of £9 2s for June rising to £10 2s per ton for February, in bulk.

France: Comptoir have fixed the price for July at 164 francs for 20 per cent and 170 francs for 20.8 per cent, being the equivalent of about £9 18s per ton, but as no reparation deliveries have been received yet from Germany; the price is a nominal one. Later positions are not quoted. Belgium: Comptoir have fixed prices ranging from £10 12s for June, rising to £11 7s per ton for December. Holland: Prices range from £10 6s for June to £11 per ton for Spring delivery. United Kingdom: Owing to the coal strike, prices have not yet been fixed.

German nitrogen products: Production in Germany has shown a large increase during last few months, and is estimated for year ending June 30, 1926, at about 480,000 tons of nitrogen (or equivalent of over three million tons of Chilean nitrate) of which about 60,000 tons in form of by-product sulfate of ammonia, 300,000 tons synthetic sulfate of ammonia, 70,000 tons cyanamide, 15,000 tons nitrate of lime, 15,000 tons nitrate of soda and 20,000 tons in other products. Of this quantity, about 350,000 tons is believed to have been consumed in Germany, and 130,000 tons exported, of which 50,000 tons to France, about 25,000 tons to other Continental countries, 10,000 tons to United States, and 45,000 tons to Japan and other Eastern countries. A further increased production of 100,000 tons is predicted for the coming year. Cost of production is believed to have been substantially reduced owing to large turnover, and it is understood that the net profits earned last year by dye and nitrogen combine, amounted to over six million pounds sterling of which 3¼ millions were paid in the form of 10 per cent dividend and 2¾ millions written off for depreciation. Prices for new season June, 1926 to May, 1927, per 100 kilos are: Leuna saltpeter, £11 9s to £12 14s 6d; nitrate of soda, £9 16s; nitrate of lime, £8 14s 6d; cyanamide, £8 8s 6d to £9 8s.

Synthetic nitrogen production in other countries is estimated at 163,000 tons of nitrogen against 125,000 tons for year ending 30th June, 1925. Principal increases are reported to have taken place in Italy, France, Japan and United Kingdom. During the coming year, a further increase of 50,000 tons is expected.

Statistics of Nitrate of Soda—12 Months Ending June 30th, in Tons

	1926	1925	1924
Production	2,580,000	2,370,000	2,185,000
Exports: Europe and Egypt	1,099,000	1,280,000	1,066,000
United States	926,000	1,101,000	930,000
Other Countries	172,000	144,000	145,000
Total	2,197,000	2,525,000	2,141,000
World's Consumption			
Europe	988,000	1,174,000	1,103,000
United States	914,000	1,037,000	937,000
Other Countries	175,000	139,000	150,000
Total	2,077,000	2,350,000	2,190,000
Visible Supply (Stock and Afloat) at 1st July,			
Europe and Egypt	314,000	215,000	129,000
United States	117,000	115,000	62,000
Other Countries	18,000	23,000	19,000
Total	449,000	353,000	210,000
Stock in Chile at 1st July	1,227,000	856,000	1,021,000

Industrial Raw Materials

TANNING MATERIALS IN BETTER DEMAND

Revival of Interest Follows Long Period of Inactivity—Myrobalans, Valonia and Wattle Bark Principally of Interest—Rosin and Turpentine Firmer on Spot and at Savannah—Antimony Quiet—Egg Albumen Weak—Interest in Varnish Gums Routine

Advanced		Declined
Damar Gum, 1c lb.	Rosin, WG, 10c 280 lbs.	Elemi Gum, 1½c lb.
Myrobalans, J1 $5.00 ton	Turpentine, 2c gal.	Myrobalans, R2, $1.00 ton
Rosin, B, D, 25c-280 lbs.	Valonia Cups, $2.00 ton	Rosin, F, 5c 280 lbs.
Rosin, G, 5c 280 lbs.	Wattle Bark, $1.00 ton	Rosin, H, I, 15c 280 lbs.
		Rosin, K. M. 20c 280 lbs.
		Rosin, N, WW, 5c 280 lbs.

Current Spot Quotations and Comments on Specific Items, Pages 462-464

A noticeably better inquiry than has been the case for months for tanning materials was noted last week. Orders are being placed for shipment parcels which would seem to indicate that buyers are no longer reluctant to anticipate their requirements for some time ahead. Myrobalans, valonia and wattle bark in particular have come in for attention with some interest shown in divi divi. Rosin and turpentine showed upward movements on the New York market. The inquiry continues healthy and the market on both items presents a firm aspect throughout. A scarcity of egg yolk in all positions continues and reports from China point to a maintenance of this position for some time.

There has been practically no change in the position of antimony during the past week although the inquiry has eased up and the market was not characterized by the price advances of the past month. Few offerings are heard from the primary markets which is attributed to the floods and the unsettled political conditions in China. Interest in egg albumen has also slowed up and the spot market has reacted downward until it is practically on a par with shipment quotations.

Dry colors are steady but quiet. Varnish gums are passing through a quiet period which has affected some prices, but on the while the market is fairly well maintained. Makers of red lead and litharge announced advances in these items last week due to higher prices for raw materials.

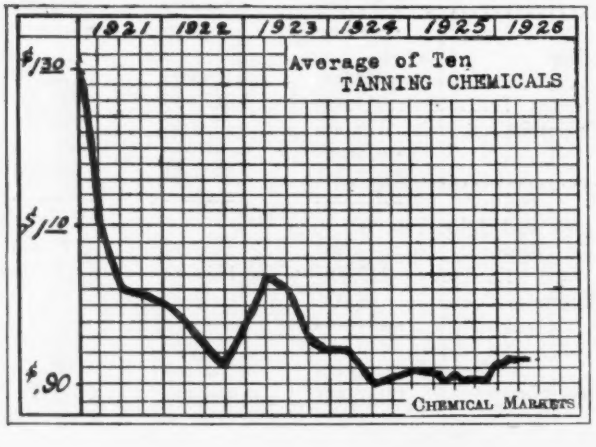
(Special to CHEMICAL MARKETS)

Savannah, Ga., July 19—The local turpentine market closed firm at 82½c gal. with a fairly good undertone. During last week the larger portion of the daily receipts were sold at the market. The week showed an advance of 2¾c gal. It is not believed here that the market will drop below 80c gal. during the summer months. Receipts this week were 7,033 bbls.; sales reported 1,841 bbls.; shipments, 4,103 bbls. and stock 16,727 bbls.

With offerings of 1,205 bbls. sold to two buyers, the market closed last week firm. Declines registered early in the week were checked and Saturday showed the market again on the advance. There have been several buyers bidding for supplies and a further advance is looked for this week. The local market is very subject to fluctuations, but with each decline new buyers enter the market and stabilize the price. Current quotations are: B, $12.25; D, $12.15; E, $12.50; F, $12.70; G, $12.80; H, $13.00; I, $13.05; K, $13.15; M, $13.15; N, $13.80; WG, $14.10, and WW, $14.30. Receipts last week were 19,659 bbls.; sales reported, 9,399 bbls.; shipments, 9,477 bbls., and stock, 75,548 bbls.

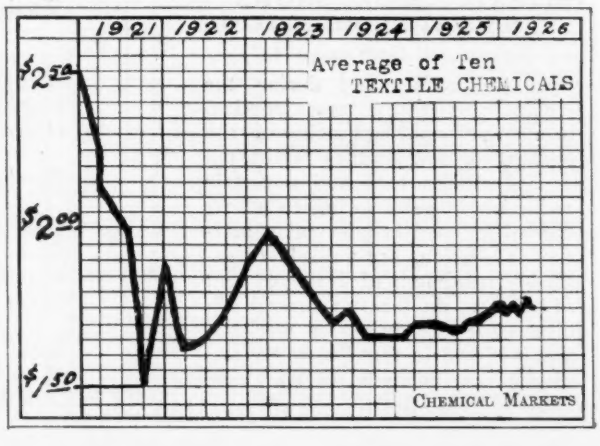
Leather Chemicals

	Today	Two Weeks Ago	Last Month	Last Year	War Peak	Pre-War
Acid, Acetic, 28%	$3.24	$3.24	$3.24	$3.12	$17.00	$1.50
Acid Formic, 90%	.10½	.11	.11	.10¾	1.50½	.07
Potassium Bichromate	.08¾	.08¼	.08¼	.08½	.65	.06¾
Epsom Salt, tech	1.70	1.70	1.70	1.70	3.75	1.00
Sodium Prussiate lb.	.10	.10	.10	10	1.25	.18
Soda Ash, 58% wks	1.38	1.38	1.38	1.38	4.10	.69
Sodium Bichromate	.06¼	.06¾	.06¼	.06½	.45	.04¾
Sodium Hyposulfite, pea	2.50	2.50	2.50	2.50	3.75	1.80
Sodium Sulfide 60% wks	.03½	.04	.04	.04	.10¼	.02¼
Average	0.927	0.927	0.927	0.927	3.267	0.528



Textile Chemicals

	Today	Two Weeks Ago	Last Month	Last Year	War Peak	Pre-War
Acid, Acetic, 28%	$3.24	$3.24	$3.24	$3.00	$17.00	$1.50
Acid Oxalic	.10¾	.10¾	.10¼	.10¾	.70	.70½
Bleaching Powder	2.00	2.00	2.00	1.90	9.50	1.50
Copper Sul c-l 100lbs.	4.85	4.75	4.75	4.50	20.00	4.60
Epsom Salt, USP	2.15	2.15	2.15	2.15	4.25	1.50
Glauber's Salt	1.00	1.00	1.05	1.25	20.00	4.60
Potash, Caustic, Imp	.07½	.07⅛	.07⅛	.07⅛	.87	.13
Soda Ash, 58% wks	1.38	1.38	1.38	1.38	1.10	.69
Soda Caustic, 76% wks	3.10	3.10	3.10	3.10	9.50	1.80
Sodium Bichromate	.06¼	.06¾	.06¼	.06½	.45	.04¾
Average	1.780	1.768	1.787	1.767	4.8008	1.25



[Agricultural Chemicals]

TANKAGE UP ON OTHERWISE QUIET MARKET

Again Advances Locally on Good Inquiry—Blood Also Firm—Sulfate of Ammonia Easy and in Small Demand—Routine Business in Nitrate of Soda—Fish Scrap Quiet—Lead Arsenate Higher as Insecticides Continue in Demand—Calcium Arsenate Unchanged

Advanced	Declined
Lead Arsenate, ½c lb.	Ammonium Sulfate, 5c 100 lb.
Tankage, ground, NY 25c unit	

Current Spot Quotations and Comments on Specific Items, Pages 450-464

Activity in local fertilizer circles continues rather sluggish with all quarters reporting only a routine business in most items. Ground tankage stands out as the strongest item on the list with good interest also displayed in blood. These ammoniates have been on the upward turn for the past two months and indications point to maintenance of the present status.

Ammonium sulfate is soft on spot and prices are generally easier for all positions. The trade here is awaiting the announcement of new schedule prices which have been expected almost daily and this is said to be in part responsible for the general quietness and unsteady position. Nitrate of soda is in much the same boat with some business reported at the last half of July schedule. It is expected that some announcement will be forthcoming from the Chilean conference at an early date which should clarify the local situation. Fish scrap is neglected on this market with some business reported at Baltimore. It is now fairly certain that the catch will not be large this season and better trading is expected by the end of this month. Otherwise the market is in much the same position as when last reported.

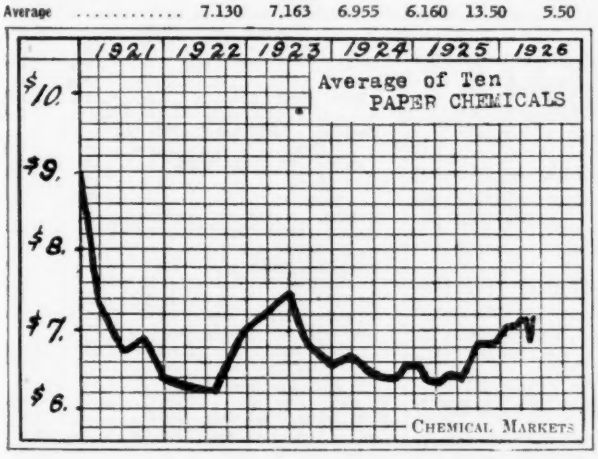
Insecticides on the other hand are active and firm with an advance in lead arsenate recorded last week. Makers state that the demand is holding up beyond their expectations for this month with no signs of a slackening in orders in sight. Although lead arsenate is the only item to show an actual advance, others are being sold on a very firm basis. Consuming inquiry for calcium arsenate has not shown any marked improvement but makers are maintaining their prices.

Potash exploration in Texas will be conducted by a representative of the Bureau of Mines, who will go to Texas shortly to organize a field force in connection with the Department of Commerce project. The Department is planning to conduct this survey in Texas this summer under an appropriation of $100,000 made by Congress. The Geological Survey will determine where holes shall be drilled and the Bureau of Mines will conduct the actual drilling operations, Mr. Hoover said.

A chemical composition, which, when added to a fertilizer gradually expels a poisonous gas that is fatal to fungi is reported discovered in Germany. The reaction extends over a period of three months, and it is said the substance is neither injurious to plant growth nor human beings and animals. The composition is known as "Subterasan," and the inventor says the German Dye Trust is negotiating to acquire the sale or manufacturing rights.

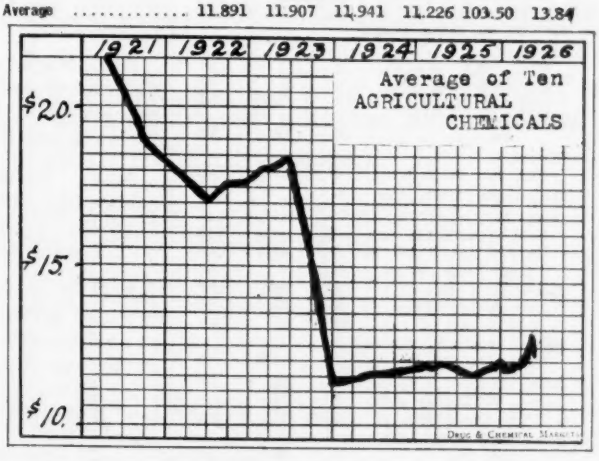
Paper Chemicals

	Today	Two Weeks Ago	Last Month	Last Year	War Peak	Pre-War
Aluminum Sulfate	1.90	1.90	1.90	2.00	5.00	1.50
Bleaching Powder	2.00	2.00	2.00	1.90	9.50	1.50
Casein	.17	.17¼	.17¼	.12¾	.28	.20
China Clay, Dom	10.00	10.00	10.00	10.00	25.00	8.00
Chlorine c-l Cyl	.05½	.05½	.05½	.05½	.50	.08
Salt Cake	10.00	19.00	19.00	17.00	80.00	11.00
Sodium Silicate, 40° ..	.80	.80	.80	.80	1.75	2.00
Soda Ash, 58% wks ..	1.38	1.38	1.38	1.38	4.10	.69
Sulfur	22.50	22.50	22.50	18.00	65.00	20.00
Rosin F grade	13.50	13.75	11.75	9.50	4.50	20.25
Average	7.130	7.163	6.955	6.160	13.50	5.50



Agricultural Chemicals

	Today	Two Weeks Ago	Last Month	Last Year	War Peak	Pre-War
Acid Sulfuric, 66° ..ton	$15.00	$15.00	$15.00	$14.00	$55.00	$20.00
Am. Sulfate ..100lbs.	2.40	2.50	2.60	2.95	1.75	2.65
Arsenic .....100lbs.	3.50	3.50	3.50	4.50	18.00	4.00
Copper Sul c-l..100lbs.	4.85	4.85	4.75	4.60	20.00	4.60
Paris Green	.19	.19	.19	.19	.50	.11
Potash Muriate, 90% ton	34.90	34.90	34.90	34.55		
Potash Sulfate, 90% ton	45.85	45.85	45.85	45.85	440.00	48.07
Phosphate, Acid, 16% ton.	10.00	10.00	10.00	10.10	11.00	3.00
Phosphate Rock 68% ..	3.15	3.15	3.15	2.50	11.00	3.00
Sodium Nitrate ..100lbs.	2.33	2.50	2.57½	2.57½	5.00	1.90
Average	11.891	11.907	11.941	11.226	103.50	13.84



Prices Current

Heavy Chemicals, Coal-tar Products, Dye-and-tanstuffs, Colors and Pigments, Fillers and Sizes, Fertilizer and Insecticide Materials, Naval Stores, Fatty Oils, etc.

Chemical prices quoted herein are those of American manufacturers for goods, spot New York, f. o. b., or ex-store, for immediate shipment, unless otherwise specified. Industrial chemical products sold principally on a basis of f. o. b. works are specified as such. Quotations on imported chemicals are so designated. Resale stocks sufficient to be a factor in the market, are quoted in addition to makers' prices and are indicated as "second hands."

Oils and fats are quoted spot New York, or ex-dock. Quotations on products sold f. o. b. mills, or spot Pacific Coast are so designated.

Industrial raw materials are quoted spot New York, f. o. b., or ex-dock. Materials sold f. o. b. works or delivered at various sections of the country are so designated.

The range of prices given is not "bid and asked," but indicates quotations from different sellers, based on varying grades or quantities or both. Containers named are the original packages most commonly used in the New York market.

Chemicals

Acetaldehyde
Acid Hydrocyanic

Acetaldehyde drs., or cyl., c-l wks	lb.	...	.26
le-l wks	lb.	.30	.35
ACETANILID, tech., 150 lb bbls	lb.	.20	.21
100 lb. kegs	lb.	.22	.23
Acetic, Anhydride			
85% 107 lb cbys	lb.	.27	.30
92 95% 100 lb cbys	lb.	.29	.35
Acetic Ether, see Ethyl Acetate			
Acetine, 50 gal drums	lb.	.37	.40
Acetone, CP, 700 lb drs c-l wks	lb.	...	.12
Tank cars, wks	lb.	...	.12
700 lb drs., le-l wks	lb.	.13	.13½
350 lb drs le-l wks	lb.	...	.14
Acetone Oils, light, drs., wks	gal.	1.65	1.75
Heavy, drs wks	gal.	1.65	1.75
Acetyl Chlorids, 100 lb cbys	lb.	.42	.45
Acetylentetrabromide	lb.	...	1.50
Acetylenetetrachloride Drums wks	lb.	.10½	.11
ACID, 1, 2, 4, 250 lb bbls	lb.	...	1.25
Acetic, 28% 400 lb bbls c-l wks	100 lb.	...	3.24
28% le-l wks	100 lb.	...	3.49
56% c-l wks	100 lb.	...	6.09
56% le-l wks	100 lb.	...	6.34
70% bbls c-l wks	100 lb.	...	7.51
70% le-l wks	100 lb.	...	7.76
80%, comi bbls c-l wks 100 lb		...	8.41
80% com'l, le-l wks	00 lb.	...	8.66
80% pure bbls c-l wks 100 lb.		...	9.30
80% pure le-l wks	100 lb.	...	9.55
Glacial, bbls c-l wks 100 lb.		...	11.47
Glacial, le-l wks	100 lb.	...	11.72
Glacial, USP, cby., wks 100 lb.		...	12.22
Anthranilic, tech., drs.	lb.	...	.80
99-100% 100 lb. drs	lb.	.98	1.00
Benzoic, tech., 100 lb bbls	lb.	.58	.60
ton, lots bbls	lb.	...	.57
Boric crys., powd., 250 lb bbls	lb.	...	.09¾
Kegs 100 lb	lb.	.10	.10½
Butyric, 60% pure 5 lb. bot	lb.	.55	.60
90%	lb.	.70	.75
Carbolic, crys, see Phenol			
Crude, 35% 50 gal bbls	gal.	.31	.33
10% 50 gal. bbls	gal.	.35	.38
Carbonic, see Carbon Dioxide			
Chloracetic,			
Mono 100 lb bbls wks	lb.	...	.25
Di, 150 lb cbys wks	lb.	...	1.00
Tri., 5 lb bot	lb.	...	2.50
Chlorosulfonic, 1500 lb. drs wks.	lb.	.15	.16
Chromic,			
98% pure 400 lb drums	lb.	.37	.40
Chromotropic, 300 lb bbls	lb.	...	1.25
Citric, USP, cryst 230 lb bbls	lb.	.44¾	.45
Powd., USP, 200 lb bbls	lb.	.45½	.46
Imported, crys, 112 lb kegs	lb.	.44½	.45
Single kegs	lb.	...	.47
Cleve's 250 lb bbls	lb.	.95	.97
Cresylic, 95% dark drs NY	gal.	.57	.60
97-99% pale NY	gal.	.60	.65
Formic, 85% tech., 140 cbys	lb.	.10	.10½
90%-90 lb cbys incl	lb.	.10½	.11
Gallic, Tech.,	bbls.	.50	.55
Gamma, 225 lb bbls wks.,	lb.	1.05	1.10
H 225 lb bbls wks	lb.	.57	.63
Hydrobromic, 48% com'l, 155 lb. cbys wks	lb.	.45	.48
48% com'l 10 cbys wks	lb.	...	.48
Hydrochloric, see also Acid Muriatic			
Hydrocyanic, wks cyl	lb.	.90	1.00

Acetone—Demand and production continue well balanced at firm unchanged prices.

Acetic Anhydride—Competition remains sharp but open quotations from makers are unchanged in all directions.

Acid Acetic — Steady conditions prevail with makers naming unchanged schedule prices.

Acid Cresylic—Market is quiet under steady routine demand. Quotations show no variation.

Acid Formic—Market is steady at unchanged prices of 10c@10½c lb for 85% and 10½c@11c lb.

Acid Gamma—Market is fairly steady at last week's advance to $1.10@$1.15 lb as to quantity.

Acid H—Although open quotations are unchanged, lower prices are understood to have been done. Prices range from 55c to 63c lb as to quantity and sharpness of competition.

Acid Lactic—Quotations on all grades are fairly steady at unchanged figures. Demand is only of fair proportions.

Acid Muriatic—Situation shows no change and quotations are unchanged from leading makers who report a usual seasonal decline.

Acid Monosulfonic — Makers quote firm unchanged prices of $1.65 lb for single barrels and report a good demand.

Acid N & W—Market remains unsettled with open quotations given at unchanged figures of 95c@99c lb as to quantity. While the lower price is supposed to apply on carlots, it has been applied to 1,000 lb orders.

Acid Oxalic—Makers name firm unchanged prices of 10¾c@11c lb.

Acid Hydrofluoric
Acid Sulfuric

ACID (cont'd)			
HYDROFLUORIC, 30-% 400 lb.			
bbls wks	lb.	...	.06
30% 100 lb cbys wks	lb.	...	.08
48% single 100 lb cbys wks	lb.	...	.10
52% 100 lb cby., wks	lb.	...	.12
52% 10 lb cbys wks	lb.	...	.11
60% 100 lb cby., wks	lb.	...	.14
60% 300 lb. dr. wks	lb.	...	.13
White Acid, 100 lb cby., wks	lb.	...	.26
White Acid, 10 cbys wks	lb.	...	.25
Hydrofluosilicic, 35% 450 lb bbls wks	lb.	...	.11
LACTIC, 22% dark 500 lb bbls	lb.	.05½	.06
22% light bbls	lb.	.06½	.07
44% dark, bbls	lb.	.11	.12
44% light, bbls	lb.	.13	.13½
66% dark, bbls	lb.	.13	.13½
66% light, bbls	lb.	.26	.27
Laurent's, 250 lb bbls	lb.	.80	.85
Metanilic, 250 lb bbls	lb.	.60	.65
Mixed, Sulfuric-nitric			
Drums, wks	N Unit	.07¾	.08
Drums wks	S Unit	.01	.01½
Tank cars, wks	N Unit	.06	.06½
Tank cars wks	S Unit	.008	.01
Molybdic, 85% pure 100 lb kegs	lb.	1.25	1.30
Monosulfonic F, Delta 50 lb tins	lb.	...	1.65
MURIATIC, 20° cbys le-l wks	100 lb.	1.70	1.80
cbys c-l wks	100 lb.	...	1.45
Tank cars, wks	100 lb.	...	1.05
18° 120 lb cbys c-l wks	100 lb.	...	1.35
Tank cars, wks	net ton	...	.95
22° 120 lb cbys c-l wks	100 lb.	...	1.85
Naphthionic, tech., 250 lb bbls	lb.	.55	.59
Nevile & Winther's 250 lb bbls	lb.	.95	.99
NITRIC, 36° 135 lb			
Cbys le-l wks	100 lb.	...	5.25
Cbys c-l wks	100 lb.	...	5.00
38° le-l wks	100 lb.	...	5.75
Cbys c-l wks	100 lb.	...	5.50
40° le-l wks	100 lb.	...	6.25
Cbys c-l wks	100 lb.	...	6.00
42° le-l cbys wks	100 lb.	...	6.75
Cbys c-l wks	100 lb.	...	6.50
CP, cbys single wks	100 lb.	.12	.13
Oxalic, 300 lb bbls., wks	lb.	.10¾	.11
Bbls., NY	lb.	.10¾	.11
Kegs, 100 lb NY	lb.	.11¼	.11¾
Imp., 560 lb casks	lb.	...	.11¼
Phosphoric, 50% tech., 150 lb Cbys	lb.	.07	.07½
Syrupy USP, 70 lb drums	lb.	.16	.17
Demis	lb.	.17	.18
Imported	lb.	.16	.17
Phthalic, see Phthalic Anhydride			
Picramic, 300 lb bbls	lb.	...	.50
Picric, 450 lb bbls c-l	lb.	.30	.33
Pyrogallic, Tech., powd., 200 lb bbls.	lb.	...	.85
Salicylic, tech., 125 lb bbls	lb.	.27	.32
Sulfanilic, 250 lb bbls	lb.	.15	.18
SULFURIC, 66° 180 lb cbys le-l wks	100 lb	1.60	1.95
Cbys, c-l wks	100 lb.	...	1.35
1,500 lb Drums le-l wks	100 lb.	...	1.20
Drums, c-l wks	100 lb.	...	1.00
Tanks cars, wks	net ton	...	15.00
60° 1500 lb drums le-l wks	100 lb.	...	1.10
Drums c-l wks	100 lb	...	.87½
Tank Cars, wks	net ton	...	10.50

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Chemicals

ACID SULFURIC (Continued)			
C.P. 175 lb cbys ....100 lb.	.07	:	.08
Oleum 20 pe 1500 lb drums lc-l wks .....100 lb.	...		1.50
Drums, c-l wks 100 lb.	...	:	1.25
Tank cars, wks ..net ton	18.00		19.00
Oleum 40% drs lc-l wks net ton	...	:	42.00
Oleum, 60% drs., lc-l wks net ton	62.00	:	72.00
Tannic, tech., 300 lb bbls ..lb.	.30	:	.40
Tartaric, USP, cryst., 300 lb bbls .....lb.	...	:	.29½
USP, powd., 300 lb bbls .lb.	...	:	.29½
Imp., USP., 240 lb bbls ..lb.	.28½	:	.29
Powd., 240 lb bbls ....lb.	.28½	:	.29
Tobias, 250 lb bbls .....lb.	...	:	.85
Tungstic, 100 lb. kegs ....lb.	...	:	1.00
Adeps Lanae hydrous 350 lb bbls. lb.	.20	:	.21
Anhydrous, 350 lb bbls .....lb.	.22	:	.23
ALCOHOL, amyl See Fusel Oil			
Benzyl, 5 lb bot .....lb.	1.45	:	1.55
Butyl Normal 50gal drs wks c-l lb.	.18¼	:	.19¼
Drums, lc-l wks .....lb.	.18¾	:	.19¾
Tanks cars wks .....lb.	.17¾	:	.18¾
Butyl Tertiary 50gal drums ..gal.	...	:	2.00
Anhydrous .....gal.	...	:	2.50
Ethyl, USP, 190pf 50gal. bbls .....gal.	4.75	:	4.80
Anhydrous, drums .....gal.	.55	:	.60
Denatured			
No. 1 complete denat. 190pf. 50gal. bbl incl ....gal.	.35	:	.49
Carlots .....gal.	...	:	...
50gal. drums extra gal.	.32	:	.42
Tank Cars .....gal.	.30	:	.40
No. 1 Special denat. 190pf. 50gal. bbl. incl ....gal.	.35	:	.44
Carlots .....gal.	...	:	...
50gal. drums extra gal.	.32	:	.42
Tank cars .....gal.	.30	:	.40
No. 5, Complete denat. 188pf. 50 gal bbl incl ....gal.	.31	:	.40
Carlots .....lb.	...	:	...
50gal. drums extra ..gal.	.32	:	.42
Tank cars .....gal.	.30	:	.40

In addition to the regular authorized formulas for completely denatured alcohol, some 75 formulas for specially denatured alcohol are authorized for special uses. Owing to the limitations of their uses however, prices are quoted by the alcohol producers only to holders of permits allowing the use of specially denatured formulas in products authorized by the Dept. of Internal Revenue.

Diacetone, 50gal. drs fght. allowed .....gal.	2.15	:	2.20
Isobutyl, crude 50gal. drs ..gal.	...	:	...
Refined, 10 lb. cans .....lb.	...	:	...
Isopropyl, refined, 90-91%, 50 gal. drs .....gal.	1.00	:	1.25
Ref'd. 98-99% drs .....gal.	1.25	:	1.50
Propyl, nml., 50gal. drs ....lb.	...	:	1.00
Aldehyde Ammonia, 100gal. drums lb.	.80	:	.82
Alpha-Naphthol, crude 300 lb bbls lb.	...	:	.65
Refined .....lb.	.85	:	.90
Alpha-Naphthylamine, 350 lb bbls lb.	.35	:	.37
Ton lots bbls wks .....lb.	...	:	.35
ALUM, Ammonia, lump 400 lb bbls wks, lc-l .....lb.	3.15	:	3.50
Ground, 400 lb bbls wks 100 lb.	3.25	:	3.65
Powd. 380 lb bbls.wks 100 lb	3.55	:	3.90
Chrome, 500 lb cks., wks lb.	5.25	:	5.50
Potash, lump 400 lb bbls wks .....100 lb.	3.50	:	3.75
Bbls. c-l wks ....100 lb.	3.35	:	3.40
Imported lump .....100 lb	...	:	3.35
Ground 400 lb bbls wks 100 lb.	3.50	:	3.85
Imp., 350 casks ....100 lb.	3.65	:	3.90
Powd., 380 lbs. bbls wks 100 lb.	3.50	:	4.00
Chrome, 500 lb cks wks 100 lb.	5.25	:	5.50
Grd, 400 lb bbls wks 100 lb.	...	:	3.75
Bbls., c-l wks., .100 lb.	...	:	3.50
Soda, ...100 lb.	...	:	3.25
Aluminum metal, c-l NY ..100 lb	...	:	37.00
Chloride, anhyd, 275 lb drs lb.	.35	:	.40
Crystals, 375 lb. bbls ....lb.	...	:	.06½
30% sol., 120 lb cbys ..lb.	...	:	.03
Hydrate 96% light 90 lb bbls lb	.17	:	.18
Hvy. 62-64% 220 lb bgs lb.	.06	:	.06½
400 lb bbls wks.....lb.	.06½	:	.07
Stearate, 100 lb bbls .....lb.	.23	:	.24

Importers are not very active in the market.

Acid Phosphoric—Quiet and unchanged.

Alcohol Denatured—Market remains sharply competitive with prices unchanged but shading the rule.

Alpha-Naphthol—Makers report a fair consuming demand and quote unchanged prices in all transactions.

Alum Potash—Market remains in an easy condition at unchanged quotations.

Aluminum Sulfate — Iron-free quotations from makers remain unchanged at $1.75 100 lbs. for carlots of bags, and $1.90 for carlots of barrels. Commercial continues at $1.40 100 lbs.

Ammonia Anhydrous—Demand is heavy and prices are quite firm from makers at unchanged figures.

Ammonia Aqua—Weak market continues with makers in possession of more material than is a demand for. Quotations are unchanged at 3½c lb for single drums delivered. Carlots are quoted at 3c@3¼c lb, and tanks at 2½c@2¾c lb, but these prices are soft.

Ammonium Chloride—Imported gray is decidedly weaker and goods are obtainable at the moment at 5¾c@6c lb. Imported white is also weak and general quotations remain at 5¼c lb, although 5c lb is done in some instances. The weakness in gray appears to have been caused by decreased demand brought about by the increased use of zinc ammonium chloride for galvanizing.

Ammonium Sulfate—Spot market continues quiet and easy with quotations unchanged. New schedule prices which have been expected almost daily are not forthcoming as yet.

Antimony — Has quieted down during the past week. Sellers are holding for 13½c@14c lb for spot parcels. Offerings from China are generally withheld due to political conditions and the floods which are said to be affecting shipping conditions.

ALUMINUM SULFATE, Iron-free bags c-l wks .....100 lb.	...	:	1.75
Bbls, c-l wks .....100 lb.	...	:	1.90
Imported, spot ....100 lb.	1.60	:	1.65
Comm'l ½% iron bgs c-l wks .....East 100 lb.	...	:	1.40
Cont. bgs c-l wks E 100 lb.	1.35	:	1.40
Bags, c-l wks ....W 100 lb	...	:	1.40
Bbls c-l wks ..E 100 lb.	...	:	1.55
Bulk, c-l cont. wks E 100 lb.	...	:	1.50
Amidol (See Diaminophenol)			
Aminoazobenzene, 110 lb kegs ..lb.	...	:	1.15
AMMONIA, anhyd., 100 lb cyl lb.	.13	:	.15
Water 26° 800 lb drs. del lb.	...	:	.03½
Drs., c-l delivered ....lb.	.03	:	.03¼
Tanks .....lb.	.02½	:	.03
CP, cbys .....lb.	...	:	.12
Acetate, 100 lb kegs .....lb.	...	:	.13
Bifluoride, 300 lb bbls .....lb.	.21	:	.22
100 lb kegs .....lb.	.23		23
Fluoride, 450 lb bbls 500 lb bxs lb.	.	:	.55
Imported, 112 lb boxes ...lb.	50	:	.52
Carb., tech., 500 lb cases ..lb.	.08¾	:	.09
Powd., tech, 350 lb cks lb.	.07¼	:	.07¾
USP, lump, 100 lb kegs ..lb.	.11	:	.11½
Powd., 100 lb kegs ....lb.	.13	:	.13½
Chloride, Domestic			
White, 250 lb bbls c-l ..lb.	..	:	.06
250 lb bbls lc-l wks ..lb.	.06½	:	.06¾
Imported white 600 lb cks lb.	.05¼	:	.05½
C.P., USP, gran bbls ..lb.	.13	:	.13½
Gray, 250 lb bbls wks ....lb.	.07¼	:	.08
Bbls., c-l wks., ...lb.	...	:	.07
Imported gray 550 lb casks lb.	.05¾	:	.06¼
Lump, 500 lb casks spot lb.	.11	:	.11½
Iodide, USP, 25 lb jars ...lb.	...	:	5.20
Lactate, 500 lb bbls .....lb.	.15	:	.16
Refined Crystals bbls .....lb.	...	:	.20
C.P. gran., 100 lb. kegs lb.	.35	:	.37
Oxalate, pure 100 lb kegs ..lb.	.35	:	.37
Persulfate, 112 kegs .....lb.	.27½	:	.30
Phosphate, dibasic 200 lb bbls lb.	...	:	.38
Tech., powdered 325 lb bbls lb.	...	:	.18
Mono, 325 lb bbls .....lb.	.12	:	.12½
Salicylate USP, 100 lb kegs .lb.	.75	:	.80
Sulfate, bulk, c-l .....100 lb.	...	:	2.45
Southern points ..100 lb.	...	:	2.55
Imp., 200 dbl. bgs. fas 100 lb	...	:	2.50
Sulfate-Nitrate, bulk fob NY .ton	...	:	81.00
Sulfocyanide, tech. 100 lb kgs lb.	.40	:	.45
Amyl-Acetate, tech., 50gal drs gal	1.75	:	1.80
Refined, 50gal. drums ..gal.	2.40	:	2.50
Alcohol, see Fusel Oil			
Butyrate absolute cans .....lb.	1.20	:	1.30
ANILINE OIL, 960 lb drums ..lb.	.15	:	.16
Hydro Bromide .....lb.	...	:	.75
Aniline Salt, 200 lb bbls .....lb.	.23	:	.24
Anthracene, 80-85% 600 lb casks wks .....lb.	.60	:	.65
Anthraquinone, sub 125 lb bbl lb.	.90	:	1.00
Antimony metal, slabs tons lots lb.	.13½	:	.13¾
Needle powd., 100 lb cases lb.	.21½	:	.22
Bromate .....lb.	...	:	1.50
ANTIMONY CHLORIDE, anhyd 1000 lb drs .....lb.	.16	:	.17
50 lb crocks .....lb.	.45	:	.48
Sol'n. 130 lb carboys 48° lb.	...	:	.17
Oxide, 500 lb bbls .....lb.	.18	:	.18¼
Sulfuret golden, 250 lb bbls ..lb.	.15	:	.16
Crimson 250 lb bbls .....lb.	.25	:	.27
Vermilion, 250 lb bbls ..lb.	...	:	.37½
Tartrolactate, 500 lb bbls ..lb.	...	:	.45
Tribromide .....lb.	...	:	1.05
Argols, red powd. 350 lb bbls ..lb.	.06½	:	.07
Arsenic metal 220 lb kegs ....lb.	.45	:	.50
Red, 224 lb kegs cases .....lb.	.11¾	:	.12
White 220 lb cases to 550 lb bbls NY .....lb.	.03⅝	:	.03½
BARIUM BINOXIDE, see Barium dioxide			
Bromate .....lb.	...	:	.70
Carbonate, precip., 300 lb bbls wks. .....ton	50.00	:	52.00
Precip. 200 lb bgs., wks ton	48.00	:	50.00
Imports, casks N Y.....ton	48.00	:	50.00
Chlorate 112 lb kegs NY ....lb.	.12	:	.12½
Chloride, 800 lb bbls wks ..ton.	65.00	:	67.00
200 lb bags, wks ..ton.	63.00	:	65.00
Imports, large crystals, bbls Spot .....ton	62.00	:	63.00
Dioxide, 88% 690 lb drs ....lb.	.13	:	.13½
Import, 86-88% 400 lb drs lb.	.13	:	.13½
Hydrate, 500 lb bbls .....lb.	.04⅝	:	.04⅝

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METHANOL

SOLUBLE COTTON

GRADES { Dope, Lacquer, Bronzing, Nitro

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Sodium Nitrite
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Nitrogen Fertilizers

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Chemicals

BARIUM Nitrate, 100 lb casks	lb.	...	.10
Imports, casks	lb.	.08¼	.08½
Sulfocyanide 600 lb bbls	lb.	.27	.28
Barytes, floated 350 lb bbls wks	ton.	23.00	24.00
Imported	ton.	29.00	33.00
Crude, clf.	ton.	...	9.00
Benzaldehyde, tech, 945 lb drs. wks	lb.	.65	.70
BENZENE			
Comm. 90% 8,000gal tks wks	gal	...	.25
Non-Corrosive 90% tks wks	gal	...	.26
Commercially pure tks wks	gal.	...	.25
Non-Corrosive pure tks wks	gal	...	.26
Nitration tks wks	gal.	...	.27
Drum lots 5c gal higher			
Benzidine Base, dry 250 lb bbls	lb.	.70	.72
Benzidine Sulfate, paste 350 lb. bbls	lb.	.68	.70
Benzol, see Benzene			
Benzoyl Chloride, 500 lb drs	lb.	...	1.00
Benzyl Acetate 100 lb., cbys	lb.	1.30	1.40
Benzoate, bulk	lb.	1.15	1.35
Chloride 95% techn, 925 lb drs	lb.	...	.15
100 lb cbys	lb.	.25	.30
Redistil. 160 lb cbys	lb.	.30	.35
BETA-NAPHTHOL 350 lb bbls wks	lb.	...	.24
Ton lots	lb.	...	.22
Sublimed	lb.	.55	.60
Beta-Naphthylamine tech., 200 lb bbls	lb.	.62	.67
Sublimed, 200 lb bbls	lb.	...	1.35
Blanc Fixe, dry 400 lb bbls wks	ton	80.00	90.00
Imported, bbls	ton.	70.00	72.00
Paste, 650 lb bbls c-l	ton	45.00	55.00
BLEACHING POWDER, 700 lb drs.			
c-l wks contract	100 lb.	...	2.00
le-l wks contract	100 lb.	...	2.15
e-l spot wks	100 lb.	...	2.10
le-l spot wks	100 lb.	...	2.25
le-l spot ex-warehouse	100 lb.	2.35	2.50
300 lb drs., c-l wks contract	100 lb	...	2.25
e-l spot wks	100 lb.	...	2.35
le-l wks contract	100 lb.	...	2.40
le-l spot wks	100 lb.	...	2.50
Blues, bronze Chinese, Milori			
Prussian Soluble	lb.	.29½	.32
Blue Vitriol, see Copper Sulfate			
Bone Ash, 100 lb kegs	lb.	.06	.07
Black, 200 lb bbls	lb.	...	.08¼
Borax, crys., 400 lb bbls	lb.	.05¼	.05¾
Powdered, 300 lb bbls	lb.	.05	.05½
Kegs, 100-150 lb	lb.	.05½	.06
Bordeaux Mixture, 16% pd		.11½	.13
Paste, bbls	lb.	.08	.10
Bromide, see potass. bromide etc.			
Bromine, bot., in 50 lb cs wks	lb.	.45	.47
Bromobenzene, 600 lb drms.,	lb.	...	.50
Butter of Antimony, see Antimony Chloride			
Butyl Acetate, tank cars, wks	gal.	...	1.50
Drums c-l wks	gal.	...	1.52
Drums, le-l wks	lb.	...	1.55
Aldehyde, 50 gal drums wks	lb.	.70	.75
Propionate drums	gal.	2.40	2.50
Tartrate drums	lb.	.57	.60
CADMIUM, metal 100 lb bxs.	lb.	.70	.75
CALCIUM, Acetate, 150 lb bgs c-l 100 lb		...	3.25
Arsenate, 100 lb bbls c-l wks	lb.	.07	.07½
Bromate	lb.	...	1.50
Bromide, 100 lb cs	lb.	...	.60
Carbide, 220 lb. dr. c-l wks	lb.	.05¼	.06¼
Carbonate techn., 100 lb bags c-l	100 lb.	1.00	1.10
USP, precip., 175 lb bbls	lb.	...	.06½
Chloride, solid., 650 lb drs c-l f.o.b. wks	ton.	21.00	23.00
Drms., delvd. NY	100 lb.	1.74	1.89
Imp., Shipment	ton.	...	19.50
Flake, 375 lb drs, c-l drs, f.o.b. wks	ton.	...	27.00
Drms., delvd. NY	100 lb.	2.04	2.19
Bags delvd. NY	100 lb.	2.04	2.19
Nitrate, 220 lb bbls c-l NY	ton	...	32.00
Phosphate, tech., 450 lb bbls	lb.	.09	.10
Phosphate, mono., 325 lb bbls	lb.	.07	.08
Stearate, bbls	lb.	.23	.25
Sulfocarbolate, 100 lb kegs	lb.	.55	.57
CAMPHOR, Amer., ref., 250 lb Bbls	lb.	...	.84
2½ lb. slabs, 100 lb cs	lb.	...	.85½
Jap., ref., 2½ lb. slabs, 100 lb cs	lb.	...	.80
Powdered	lb.	...	.77
Crude, 100 lb. cs	lb.	.54	.56

Arsenic—Demand is of small routine character. Holders of imported material continue to quote 3½c lb and there appear to be some that are willing to accept bids of 3⅜c lb.

Barium Carbonate — Market is quiet but steady at last week's reduction to $48.00 ton for carlots spot. One and two ton lots are named at $50.00 ton.

Barium Chloride—Conditions are unchanged with goods changing hands at $62.00@$63.00 ton from importers and domestic prices $1.00 or $2.00 ton higher.

Benzene — Conditions are unchanged. Producers and distributors generally are obtaining unchanged prices but material is plentiful and the market is decidedly easy. Some competition is reported and prices have been shaded by 1c or more a gallon. A demand for motor benzene that is far behind other years, with steel and coke production maintained at high figures, is the cause of these unusual conditions at this time of the year.

Benzidine — Market is barely steady at unchanged prices.

Beta-Naphthol—Demand is steady and quotations are firm and unchanged in all directions.

Bleach—No new developments reported. Quotations are firm and unchanged.

Blues—Unchanged this week and quiet. Prices are well maintained but the inquiry is light.

Calcium Arsenate—Some activity noted in this territory with sales reported at the sellers' price. Nothing has developed in the way of large sales to the South as yet.

Casein — Leading importers of South American quote 17c lb for spot and shipment, stating that the inquiry is routine at the moment, with very little differential between spot and forward prices.

Chrome Yellow—Firmer with the advance in lead prices. Sales are being made on the basis of 17c@17½c lb, f. o. b. makers' works.

Copper Sulfate—Market remains in a very strong position at last week's advance to $4.85 100 lbs. for carlots at works and New York. Spot cars are exceedingly scarce.

Carbazol, 250 lb bbls	lb.	...	.15
Carbon Bisulfide, 500 lb drs le-l NY	lb.	.06	.06½
e-l drums, NY	lb.	...	.05½
Carbon Black, e-l wks bags	lb.	.08	.09
100-300 lb cases le-l NY	lb.	...	.12
Decolorizing 49 lb bgs e-l	lb.	.08	.15
90 lb drms e-l	lb.	.03¾	.15¾
Carbon Dioxide, Liquid 20-25 cy	lb.	...	.06
Tetrachloride, 1400 lb drs del	lb.	.06½	.07
Drums e-l delivered	lb.	...	.06¼
Casein, edib., 100 lb., kegs	lb.	.45	.65
Standard ground,	lb.	.17	.17¼
Caustic Potash, see potash, caustic			
Soda, see soda, caustic			
Cellulose Acetate, 50 lb. kegs	lb.	...	1.45
Cerium Oxalate, USP, 100 lb kegs	lb.	.33	.35
Chalk, drop 175 lb bbls	lb.	.03	.03½
Precip., light 250 lb bbls cwks	lb.	...	.04¼
Precip., heavy 560 lb cwks	lb.	.02¼	.03½
Bulk	ton.	...	5.00
Precip., English, 7 lb bags	lb.	...	.03½
Precip., heavy 560 lb cwks	lb.	.03½	.03¾
Chinese Blue, See Blue			
chloramine USP, 200 lb bbls	lb.	...	1.75
Chlorobenzene, 5 lb. bot	lb.	.55	.65
Chlorhydrin, Ethylene, See Ethylene			
CHLORINE, Liquid, tank or multi-unit car wks contract	lb.	...	.04
Tank car spot wks	lb.	...	.04½
Carlots cyl., wks. contract	lb.	...	.05½
spot, wks	lb.	...	.05¾
le-l cyl., wks., contract	lb.	.03	.09
Spot wks	lb.	.08¼	.09¼
Chlorobenzene, mono, 100 lb drs. wks le-l	lb.	...	.07
CHLOROFORM, USP, 50 lb drs	lb.	...	.30
Second hands, 650 lb drs	lb.	...	.26
Technical 1,000 lb drums	lb.	.20	.22
Chlorophyll Oil Sol.	lb.	3.75	4.00
Water Sol.	lb.	3.75	4.00
Chromium Acetate 20° sol'n., 400 lb bbls	lb.	...	.05½
Fluoride, Powd., 400 lb bbls	lb.	.27	.28
Oxide, Green bbls	lb.	.34½	.35½
Chrome Green, CP	lb.	.27	.29
Comm.	lb.	.06½	.11
Chrome Yellow	lb.	.17½	.18½
Citric Acid, see Acid Citric			
Coal Tar, See Tars			
Cobalt metal, 100 lb kegs	lb.	2.50	3.00
Cobalt Oxide, 500 lb bbls	lb.	2.00	2.10
10 lb. tins, 200 lb cases	lb.	...	2.20
COPPER, metal electrolytic e-l NY	100 lb.	14.17½	14.25
Lake c-l NY	100 lb.	14.25	14.50
Casting e-l NY	100 lb	...	12.25
Carbonate 400 lb bbls	lb.	.16¾	.17¼
Chloride, 250 lb bbls	lb.	...	.28
Cyanide, 100 lb. drs	lb.	.48	.50
Oxide, red 1000 lb bbls ton lts	lb.	.16½	.17
Sub-Acetate, verd. 440 lb bbls	lb.	.17	.18
SULFATE, crys., 450 lb bbls le-l Spot	100 lb.	5.00	5.10
Carlots bbls wks.	100lbs.	4.75	4.80
Carlots bbls fob NY	100lbs.	4.85	4.90
Powd. 350 lb 5bbls	100 lb.	...	5.25
Copperas bulk, e-l wks	ton	12.00	13.00
200 lb bgs. e-l wks	ton	14.50	15.50
400 lb bbls e-l wks	ton	17.00	18.00
Powdered bbls	100 lb.	1.90	2.00
Sugar, 400 lb bbls	100 lb.	1.25	1.35
Bulk, wks	ton.	8.00	9.00
Cotton Soluble, 100 lb. bbls wet	lb.	.40	.42
Cottonseed, Meal 7%	ton.	30.00	32.00
CREAM TARTAR, USP, 300 lb. bbls	lb.	.21	.21¼
Imp., powd. USP, 224 bbls	lb.	.21	.21¾
Creosote, USP, 42 lb. cbys	lb.	.40	.42
Creosote Oil Neutral, 50gal drs	gal.	.20	.21
10-15% Tar acid	gal.	.25	.26
25-30% Tar acid	gal.	.28	.29
Cresol, USP, 400 lb drums	lb.	.20	nom.
Cyclohexanol, see Hexalene			
Cymene, See Para-Cymene			
DIAMINOPHENOL, 100 lb., kegs	lb.	...	3.80
Diamyl Phthalate, drums, wks	gal.	3.70	4.00
Dianisidine, 100 lb kegs	lb.	3.25	3.50
Dibutyl Phthalate, wks	gal.	3.15	3.50
Dibutyl Tartrate, 50 gal. drums	lb.	.55	.65

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Finely ground, and possessing the essential attribute of purity, Kalbfleisch Sulphate of Soda is ideal as a standardizing agent for dyestuffs. Packed in paper-lined barrels.

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200 Fifth Ave., New York

Dichlorobenzene
G Salt

Chemicals

Glauber's Salt
Magnesium Carbonate

Dichlorobenzene, 1,000 lb drums	lb.	.06	.07
Dichloromethane, Drums wks	lb.	.22	.25
Diethylamine, 400 lb drs	lb.	...	2.15
Diethylaniline, 850 lb drs	lb.	.55	.60
Diethyl Carbonate, drums	gal.	1.85	2.00
Diethyl Phthalate 1,000 drums	lb.	.25	.28
Diethyl Sulfate tech., 50gal. drs	lb.	.20	.25
C.P., drums	lb.	.40	.50
Dimethylamine, 400 lb drs	lb.	...	2.60
Dimethylaniline 840 lb drs, wks	lb.	.30	.32
Dimethylsulfate, 100 lb. drs	lb.	.45	.50
Dinitrobenzene, 400 lb bbls	lb.	.15	.15½
Dinitrochlorobenzene, 400 lb bbls	lb	.15	.16
Dinitrochlorine, 800 lb bbls	lb.	.18	.19
Dinitronaphthalene, 350 lb bbls	lb.	.33	.34
Dinitrophenol, 350 lb bbls	lb.	.31	.33
Dinitrotoluene, 300 lb bbls	lb.	.15	.17
Diorthotolylguanidine, 275 lb bbls, wks	lb.	1.05	1.08
Diphenylamine	lb.	.48	.50
Diphenylguanidine, 5,000 lbs. 100 lbs.	lb.	.85	.91
EPSOM SALT, tech., 300 lb bbls			
NY	100 lb.	...	2.15
Bbls c-l NY	100 lb.	...	2.00
100 lb c-l NY	100 lb.	1.80	1.75
Imp., 220 lb bgs c-l		1.10	1.20
USP, 200 lb bbls 10 bbls	100 lb.	...	2.50
Carlots, bbls kegs	100 lb	2.00	2.25
Imported, 400 lb bbls	100 lb.	1.70	2.00
ETHER, USP, 55 lb drums	lb.	...	.14
Anaesthesia, 55 lb drums	lb.	...	.19
USP, 1880 55 lb drums	lb.	...	.40
Washed, 55 lb drums	lb.	...	.37
Motor 1 lb bottles	lb.	.30	.32
Ether, Nitrous, 1 lb bot	lb.	.90	.95
Ethyl Acetate, 99% 50gal drs	gal.	...	1.05
85% Ester, 10gal. drs.	gal.	...	.83
Carlots, drums	gal.	...	.80
Tank cars	gal.	...	.78
Refined drums	gal.	1.72	1.85
Aceto Acetate drums wks	lb.	...	1.00
Benzyl Aniline, 300 lb drs	lb.	...	1.00
Bromide, 115 lb drs	lb.	...	.50
Butyrate, cans	lb.	1.10	1.20
Chloride, 200 lb drs	lb.	...	.22
Lactate drums wks	gal.	...	2.50
Methyl Ketone, 50gal drs	lb.	.30	nom.
Oxalate drums wks	lb.	.45	.55
Ethylene Bromide, 600 lb drs	lb.	...	.70
Chlorhydrin, ankyd., 50gal drs	lb.	.75	.85
40% Solution, 50gal bbls	lb.	.25	.30
Dichloride, 50gal drs	lb.	...	.15
Tank cars	lb.	...	.10
Glycol 50gal. drums wks	lb.	.30	.40
Tri Chloride	lb.	.10	.10½
Ethylidenaniline	lb.	.62	.65
Feldspar, bulk	ton.	20.00	25.00
FERRIC CHLORIDE, tech., crys. 475 lb bbls	lb.	.07½	.09
Imported	lb.	.04¾	.05
C.P., crys., 100 lb. kegs	lb.	...	.10
Imported	lb.	.06	.06½
Neut. Soln 42° 140 lb cbys	lb	.06½	.07
46° 140cbys	lb.	.08	.08½
USP., Sol'n., 125 lb cbys	lb.	.06½	.07
Bromide, solution	lb.	...	.55
Ferrous Bromide, sol'n.,	lb.	...	.55
Chloride cryst tech 475 lb bbls	lb.	.05	.06
Sulfide 1,000 lb. bbls	100 lb.	2.50	3.00
Flake-White, see Lead White			
Fluorspar, 95% 220 lb bags ex-dock	ton.	...	25.00
96% bags	ton.	...	33.50
98% bags	ton.	...	35.00
FORMALDEHYDE USP 400 lb bbls c-l wks	lb.	.09	.09¼
Carboys 100 lb lc-l wks	lb.	...	.10¾
Bbls 400 lb lc-l wks	lb.	.09¼	.09½
Formaldehyde Aniline 100 lb drs	lb	.39	.42
Formanniline,	lb.	.38	.40
Furfural, 500 lb drums	lb.	...	.17½
Tanks, wks	lb.	...	.15
Fusel Oil, 10% Impurities drs	gal	1.25	1.30
Refined	lb.	2.25	2.28
G SALT, paste 360 lb bbls basis 10%	lb.	.50	.52

Dimethylaniline—Demand is fair with seasonal decline noted. Quotations are firm and unchanged in all directions.

Diamyl Phthalate—Market sharply competitive but open quotations are unchanged.

Diethyl Phthalate—Resale material continues to disturb this market, somewhat but quotations from makers are unchanged.

Dinitrotoluene—In slight demand at unchanged prices.

Diphenylamine — Maker quotes firm unchanged prices.

Ethyl Acetate—Market remains firm at unchanged prices.

Ethyl Lactate—Demand is satisfactory to sellers at unchanged prices of $3.50 gallon.

Ethylene Glycol—In good demand at unchanged prices.

Ferric Chloride—Quotations from makers and importers are firm and unchanged.

Glauber's Salts—Demand continues light and stocks large. Selling competition is of increased sharpness but prices are fairly steady at last week's reduction to $1.00 100 lbs. for carlots of barrels.

Glycerin — Market has turned easier. Dynamite sold during the week for 29c lb, but middle-western cars are held at 30c lb. Volume of business is small and sales are being made only to those of the regular trade as are willing to cover themselves for the next two months. Sellers are asking for bids and there is little interest on the part of buyers. Crude saponification is slightly lower at 22½c lb for 88% loose but no sales are reported. Soap lye is offered at steady prices of 19½c@20c lb. C. P. quotations are unchanged at 31c@32c lb.

Lead Acetate—Market is strong due to advances in lead quotations. Demand is good.

Lead Arsenate—Makers report continued good sales and an advance in current prices. The position is very firm at $13.65@$13.75 100 lbs.

Lead, Red—Was advanced last week due to higher lead prices and is now quoted at 11¾c lb f. o. b.

GLAUBER'S SALT, tech, 200 lb bags c-l wks	100 lb.	...	1.00
lc-l wks	100 lb.	1.05	1.15
350 lb bbls c-l wks	100 lb.	...	1.10
Bbls., lc-l wks	100 lb.	1.25	1.35
Imported, bags NY	lb.	.75	.80
Calcined, see Sodium Sulfate			
GLYCERIN, CP, 550 lb drums	lb.	.30	.31
Cans, 50 lb	lb.	.32	nom.
Dynamite, 100 dr	lb.	.29	.30
Saponification, tanks	lb.	...	.22½
Soap, Lye tanks	lb.	.19	.19½
Hexachlorethane Drums wks	lb.	...	.45
Hexalene, 50gal. drs, wks	lb.	.55	.57
Hexamethylenetetramine, USP, 100 lb drums	lb.	.60	.62
Imported	lb.	.58	.60
Rubber Makers, Impalp. Pd. drs	lb.	.80	.82½
Hi-Flash Naphtha 8,000gal. tks wks.	gal.	...	.35
Drums wks	gal.	...	.40
HYDROGEN PEROXIDE, 10 vol. 400 lb. bbls	lb.	.04½	.05
15vol.	lb.	.06	.06½
17vol	lb.	.07	.07½
25vol.	lb.	.07	.07½
100vol. 140 lb cbys	lb.	.31	.33
IODINE, crude 200 lb. kegs	lb.	4.20	4.25
Iridium, metal, 10cm. lots	oz.	...	260.00
Iron, metal by hydrogen 1 lb bot.	lb.	.68	.70
IRON Chloride, see Ferric or Ferrous			
Nitrate, kegs	lb.	.09	.10
Com'l bbls	100 lb.	2.50	3.25
Oxide, red Spanish	lb.	.02½	.03¼
English	lb.	.10	.12
Perchloride, see Ferric Chloride			
LANOLIN see Adeps Lanae			
LEAD, metal, c-l NY	lb.	8.50	8.60
Acetate, white crystals, 500 lb bbls. wks	100 lb.	14.00	14.50
100 to 250 lb kegs wks	100 lb.	...	15.00
White, broken bbls wks	100 lb.	14.50	15.00
White, gran bbls wks	100 lb.	14.50	15.00
White, powd bbls wks.	100 lb.	14.75	15.25
Brown, broken bbls wks	100 lb.	13.00	13.50
Arsenate, 100 lb kegs	lb.	.13¾	.14
Bbls., c-l wks	lb.	...	.14
Bbls., lc-l wks	lb.	.14	.14½
Paste, 100 & 600 lb bbls	lb.	.08	.09
Nitrate, 500 lb bbls. wks	lb.	...	.14
Oxide, Litharge, 500 lb bbls	lb.	...	.11¼
100 kegs wks	lb.	.14¼	.15¼
Oxide, red, 500 lb bbls wks	lb.	...	.11¾
100 lb. kegs wks	lb.	.12¾	.16¾
Oleate, bbls	lb.	.17¼	.18
Peroxide, 100 lb drs	lb.	.25	.30
White, basic carb., 500 lb. bbls. wks	lb.	...	.10¾
100 lb kegs wks	lb.	.14¼	.15¾
White sulfate 500 lb bbls wks	lb.	...	.10
LIME, (Salts, see Calcium Salts)			
Ground Stone, bags	ton.	...	4.50
Live, bulk	ton.	...	8.50
Live, 325 lb. bbls ton lots wks	100 lb.	...	1.05
Single bbl., wks	100 lb.	...	1.08
Hydrated, 167 lb bbl. ton lots. wks	100 lb.	...	.85
Single bbl. wks	lb.	...	.01
Oyster Shell, 150 lb bbl. sing	lb.	...	.03¼
Sulfur, dry 200 lb. drs NY	lb.	...	.08½
Drs., c-l NY	lb.	...	.07½
33° Sol'n., 50 lb bbls N Y	gal.	.13	.12½
Litharge see lead oxide			
Lithium Carb., USP, 100 lb. kgs	lb.	1.45	1.50
Bromide, 100 lb cs	lb.	1.80	1.90
Lithopone, 400 lb bbls lc-l wks	lb.	...	.06¼
Bbls., c-l wks	lb.	...	.05½
Bags, c-l wks	lb.	...	.05¾
Imported, 400 lb bbls	lb.	.05¾	.06
Litmus Cubes	lb.	.90	1.00
Second hands	lb.	...	.15
MAGNESITE, calcined, 500bbls	ton.	48.00	50.00
Magnesium, mtl., sticks 100 lb cs f.o.b. wks	lb.	...	.85
Bromate	lb.	...	1.50
Carb., tech., 70 lb bags NY	lb.	.06½	.06¾
75 lb bbls NY	lb.	.08	.08½
USP, 100 lb bbls	lb.	.09½	.10
English, cs. blocks	lb.	.17	.19

DIAMOND METHANOL

Highest Possible Purity

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The Best Cutting Qualities

FLOTATION OIL
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METHYL ACETONE
A High Grade Solvent

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28% to 100% Strength

IRON LIQUOR
Uniform Strength

ACETATE OF LIME
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DIBUTYL PHTHALATE
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THE KESSLER CHEMICAL CO.

ORANGE **NEW JERSEY**

MAGNESIUM Chloride, flake 575 lb drs. c-l wks	ton	...	37.00
Imp., Flake Shipt.	ton.	...	33.00
Imp., fused 900 lb bblsNY	ton.	...	31.00
Fluosilicate, crystals 400 lb bbls wks	lb.	.10	.10 ½
30% sol'n. 500 lb bbls wks	lb.	.07	.07½
Sol'n. bbls c-l wks	lb.	...	.06
Oxide, USP, light 100 lb bbls	lb.	...	.42
USP, heavy, 250 lb bbls	lb.	...	.50
Salicylate, 100 lb. kegs	lb.	.75	.80
Stearate bbls	lb.	.23	.25
Sulfate, see Epsom Salts			
Manganese Borate, 30% 200 lb bbls	lb.	...	.24
100 lb kegs	lb.	...	.25
Chloride, 600 lb cskslb.		.08	.08½
Dioxide, 80-84% 900 lb bbls NY	ton.	80.00	85.00
85-90% 900 lb bbls NY	ton.	85.00	90.00
Hydrated, precip 100 lb kgs	lb.	.15	.23
Ore, bulk, cif NY	lb.	.41	.43
Sulfate, 550 lb drums NY	lb.	.07	.07¼
MERCURY, metal 75 lb flask	flask	91.50	92.50
Meta-Nitroaniline	lb.	.72	.74
Meta-Nitro-para-Toluidine, 200 lb. bbls	lb		1.75
Meta-Phenylenediamine, 300 lb. bbls	lb.	.90	.94
Meta-Toluylenediamine, 300 lb. bbls	lb.	.72	.74
Tanks	lb.	...	.70
METHANOL (Wood Alcohol)			
95% tanks	gal.	...	.52
Drums, c-l	gal.	...	.55
Drums, lc-l	gal.	.55	.58
97% tauks	gal.	...	.54
Drums, c-l	gal.	...	.57
Drums, lc-l	gal.	.57	.60
Pure, Acetate free, tanks	gal.	...	.65
Drums, c-l	gal.	...	.68
Drums, lc-l	gal.	...	.70
Bbls, incl., 6c higher			
U.S. denat. grd., tanks	gal.	.63	.68
Drums, c-l	gal.	.63	.68
Methyl Acetate drums	gal.	...	.95
Methyl Acetone, 100gal. drums	gal.	.68	.70
Tank, cars	gal.	...	.65
Bromide	lb.	...	1.00
Chloride, 90 lb cyl	gal.	.55	.60
Salicylate, USP, 50 lb cans	gal	...	.37
500 lb drums	lb.	...	35
Michler's Ketone, 225 lb bbls	lb.	3.00	3.25
Milk, powd., 150 lb bbls	lb.	.14	.15
Milk Sugar, see Sugar of Milk			
Mining Salts Drums wks	lb.	...	.33
Monobromobenzene See Bromobenzene			
Monacetine, See Acetine			
Monochlorobenzene, see Chlorobenzene			
Monethylaniline, 900 lb drs.	lb.	...	1.05
Monomethyl paraminophenol sulfate 100 lb drs.	lb.	3.95	4.20
NAPHTHA, see Solvent Naphtha			
NAPHTHALENE, Flake, 175 lb bbls wks	lb.	.05	.05¼
Balls, 250 lb bbls wks	lb.	.06	.06¼
Crushed, chipped bgs., wks	lb.	...	.04½
Crude, imp., bags	lb.	.01¼	.02¼
NICKEL			
Ingot 100 lb kegs		...	.35
Chloride, bbls kegs	lb.	.21	.24
Oxide, 100 lb kegs NY	lb.	.35	.38
Salt single 400 lb bbls NY	lb.	.08	.08½
Double 400 lb bbls NY	lb.	.08½	.09
Sulfate, See Nickel Salt, single			
Nickel Metal, electrolytic	100 lb.	...	34.00
Nicotine, Free 40% 8 lb. tins cs	lb.	1.10	1.20
NITRATE SODA, spot, See Sodium Nitrate			
Nitre Cake, bulk wks	ton.	4.50	5.50
500 lb bbls	ton.	13.00	14.00
Nitrobenzene, crude, 1,000 lb. drs wks	lb.	.08	.09
Redistilled, 1,000 drs wks	lb.	.08½	.09½
Nitronaphthalene, 550 lb bbls	lb.	...	.25
Nitrotoluene, mixed 1,000 lb drs wks	lb.	.14	.15

works. Sales are reported in good volume.

Litharge—Has also been advanced on higher raw material costs and is this week quoted at 11¼c lb.

Meta-Nitro-Para-Toluidine — Demand is of good volume and makers are maintaining prices at $1.75 lb for single barrels.

Meta-Toluylenediamine — Market is quiet under fair routine demand. Open quotations are unchanged but competition remains sharp.

Methyl Acetone—Market is higher at 68c lb for carlots of drums.

Methanol—Producers have advanced quotations on denaturing grade and the lowest figure named for tanks is 60c gal delivered, while some producers name 65c gal. and claim that business has been refused at 62c gal. Producers are in better control of the situation due to elimination of surplus stocks.

Monochlorbenzene—Makers are firm at unchanged prices.

Naphthalene—Market has weakened further and small lots of balls are offered 5c lb with this figure open to shading for fair-sized quantities. Balls are likewise lower at 6c lb with shading intimated.

Nickel Salts—Demand is fair and quotations show little variation.

Nitrobenzene—Makers are firm in their quotations at 8½c@9½c lb for carlots of redistilled with the inside figure applying to carlots.

Ortho-Toluidine—Market is quiet but firm with all production finding a ready outlet at 25c@27c lb.

Para-Nitroaniline — Market remains sharply competitive. Makers name unchanged prices of 44c @45c lb as to quantity.

Para-Phenylenediamine — Quiet. Prices are firm and unchanged.

Para-Toluidine—Stocks in makers' hands remain large but prices are being maintained at 50c lb for the ordinary run of business.

Phenol—Market has weakened further since last week and a further reduction of 2c lb has been made making a total reduction of 4c lb in two weeks. Quotations are given at 18c@19c lb for destructible drums of 240 lb. Competition remains sharp with demand of fair routine volume.

Ochre	lb.	...	.03½
Oil Fusel See Fusel Oil			
Oil Mirbane, see nitrobenzene			
Orange Mineral, 1100 lb cskslb.		...	.14½
700 lb bbls NY	lb.	...	.14¾
Ortho-Aminophenol, 50 lb. kegs	lb.	2.20	2.25
Ortho-Anisidine, 100 lb drs	lb.	2.50	2.75
Ortho-Dichlorbenzene, see Dichlorbenzene			
Ortho-Nitrochlorobenzene, 1,200 lb. drs. wks	lb.	.32	.35
Ortho-Nitrophenol, 350 lb	lb.	.85	.90
Ortho-Nitrotoluene, 1,000 lb drs. wks	lb.	.13	.15
Ortho-Toluidine 350 lb bbls	lb.	.25	.27
PALLADIUM, metal 10oz. lots	oz.	80.00	81.00
Para-Aminoacetanilid, 100 lb. kegs	lb.	1.00	1.05
Para-Aminophenol, 100 lb kegs	lb	...	1.15
Hydrochloride, 100 lb kegs	lb.	1.25	1.30
Para-Dichlorbenzene, 150 lb bbls. wks	lb.	.17	.20
25-50 lb kegs	lb.	.20	.21
Paraldehyde, USP, 5 lb bot	gal.	.87	nom.
Tech.	lb.	.30	.35
Para-Cymene Refd. 110gal. drs.	gal.	2.25	2.50
Paraformaldehyde, USP, 100 lb cs	lb.	.42½	.45
Para-Nitroacetanilid, 300 lb bbls	lb.	.50	.55
PARA-NITROANILINE, 300 lb bbls. wks single bbls	lb.	.44	.45
Para-Nitrochlorobenzene, 1,200 lb drs. wks	lb.	...	.32
Para-Nitro-ortho Toluidine, 300 lb. bbls	lb.	2.75	2.85
Para-Nitrophenol, 185 lb bbls	lb.	.50	.55
Para-Nitrosodimethylaniline, 120 lb. bbls	lb.	.92	.94
Para-Nitrotoluene, 350 lb bbls	lb.	...	.30
Para-oxy Benzaldehyde, 100 lb kegs	lb.	...	1.70
Para-Phentidin, 500 lb drs.	lb.	1.55	1.80
Para-Phenylenediamine, 350 lb. bbls	lb.	...	1.20
Para-Toluene-Sulfonamide, 175 lb. bbls	lb.	.40	.41
Para-Toluene-Sulfonchloride, 410 lb. bbls. wks	lb.	.13	.30
Para-Toluidine, 350 lb bbls wks	lb.	.59	.60
PARIS GREEN,			
Arsenic Basis, 500 lb kegs	lb.	.19	.20
Kegs, 100lbs.	lb.	.21	.22
Kits, 56, 28, 14lbs.	lb.	.22	23
Packages, 5 and 2lbs.	lb.	.23	.24
Packages 1 lb., ½ lb., ¼ lb.	lb.	.25	.26
*Paris White, see Whiting French			
PETROLATUM, green 300 lb bbls	lb.	.03½	.03
Dark Amber, 300 lb bbls	lb.	...	.04¼
Light Amber, 300 lb bbls	lb.	...	.04½
Cream White USP 300 lb bbls	lb.	.07	.07½
Lily White, USP, 300 lb bbls	lb.	...	.07¾
Snow White, USP, 300 lb bbls	lb.	...	.12½
Phenol, see also acid carbolic			
Makers 950 lb drums spot	lb.	.21	.22
Small drums 240-100 lb.	lb.	.22	.24
Open market drums	lb.	...	.21
Natural 240 lb des drs. wks	lb.	...	...
Phenyl-Alpha-Naphthylamine 100 lb. kegs	lb.	1.28	1.29
Phosgene, 100 lb. cylinders	lb.	...	...
Phosphorus Oxychloride, 175 lb cyl	lb.	.35	.40
Phosphorus, red 110 lb cs	lb.	.68	.70
Yellow 110 lb cs wks	lb.	...	.32
Imported, 110 lb cs wks	lb.	.35	.37½
Phosphorus Trichloride, 175 lb cyl. wks	lb.	...	.45
Phthalic, Anhydride, 100 lb bbls. wks	lb.	.13	.20
Pitch, Coal-Tar wks	ton.	24.00	26.00
Plaster Paris, techn., 250 lb bbls	bbl.	...	3.30
Platinum metal soft 10 oz lots	oz.	...	112.00
POTASH SALTS, rough			
Pot. Muriate, basis 80% bags	ton	...	34.90
Pot. Sulfate, basis 90% bgs.	ton	...	45.85
Pot. & Mag., Sulfate, basis 48% bags	ton	...	26.36
Manure Salts basis 30% bulk	ton	...	16.00
Manure Salts, basis 20% bulk	ton	...	11.35
Kainit, basis, 12.4% bulk	ton	...	8.50
Discounts 50tons, 5%; 500 tons 10%			
Bulk in bags, $2.00 extra Prices cif. Atlantic&Gulf Ports			

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Potassium Acetate
Soda Ash

Chemicals

Soda Caustic
Tri-Sodium Phosphate

POTASSIUM Acetate, USP, 100 lb. kegs	lb.	.29	.30
Second Hands, kegs	lb.	.26	.28
Bicarbonate crys 320 lb bbls	lb.	.09	.09½
Bichromate crys., 725 lb csks	lb.	.08¼	.08½
Powd. 725csks., wks	lb.	.11	.12
Binoxalate, 300 lb bbls	lb.	.16	.17
Impart, 112 lb bbls	lb.	.18	.19
Bisulfate, 100 lb kegs	lb.	...	.30
Bromate, 100 lb. cs	lb.	...	.35
BROMIDE, USP, cryst., 450 lb bbls	lb.	.48	.49
Granular, 300 lb bbls	lb.	.48	.49
Cases, 100 lb	lb.	...	.50
Imported, USP, 220 lb cs	lb.	.38	.41
CARBONATE, 80-85% calc. 300 lb cks	lb.	.05⅝	.05¾
80-85% hydrated, 300 lb Casks	lb.	.05⅝	.05½
90-95% calc. casks	lb.	.06¼	.06½
96-98% calc., casks	lb.	.06¾	.07
99% calc. casks	lb.	...	.07½
USP, 100 lb kegs	lb.	.11	.11½
99% CP, casks	lb.	...	.12½
Chlorate, cryst. 112 lb. kgs c-l wks	lb.	.08½	.09
Imp. 112 lb NY	lb.	.08¼	.08½
Powd., 112 lb kegs wks	lb.	.08½	.09
Imp., kegs NY	lb.	.08¼	.08½
Gran. Imp., 112 lb kegs NY	lb.	.10½	.11
Pyrotechnic, fine powd, NY	lb.	...	.07
Chloride, crys. bbls	lb.	.05½	.05½
Chromate, kegs	lb.	.27	.28
Citrate, USP, 50 lb	lb.	...	.60
Cyanide, 110 lb cases	lb.	.55	.57½
Metabisulfite, 300 lb bbls	lb.	.11	.12
Imp., 550 lb bbls	lb.	.11	.13
Nitrate, see Saltpetre			
Oxalate, neutral, 225 lb bbls	lb.	.16	.17
Perchlorate 112 lb kegs	lb.	.11	.12
PERMANGAN, USP, crys., 500 lb. & 100 lb drs. wks	lb.	.14½	.15
Imp., 113 lb drs.	lb.	.13¾	.14¼
Prussiate red, 220 lb. bags	lb.	.39	.40
Prussiate, yellow 500 lb casks	lb.	.18	.18½
Sulfocyanide, CP, 25 lb jars	lb.	...	.50
Tartrate, neutral 100 lb kegs	lb.	...	.51
Titanium Oxalate, 200 lb bbls	lb.	...	.25
Pyridine, 50 gal drums	gal.	4.00	4.10
QUICKSILVER, see Mercury			
Quinone, 100 lb kegs	lb.	1.75	2.25
R SALT, 250bbls, wks	lb.	.45	.47
Red Lead, See Lead Oxide			
Rochelle Salt, USP, 225 lb bbls	lb.	.20	.20½
Imp., USP, 300 lb bbls	lb.	.19	.19½
Sal Ammoniac, see Ammon. Chloride			
Sal Soda, see Sodium Carbonate			
Salt, Common, see Sodium Chloride			
Salt Cake 94-96% c-l wks	ton	19.00	20.00
White, 87% wks	ton	15.00	17.00
SALTPETRE, Double refined Granular, 450-500 lb bbls. c-l wks.,	lb.	...	.06
Less c-l wks	lb.	.06⅛	.06¼
Powdered, bbls., c-l wks	lb.	...	.07¼
Large Crystals, bbls c-l wks	lb.	...	.08
Triple Refined Gran., bbls., less c-l wks	lb.	.06⅝	.06¾
Satin White, 500 lb bbls	lb.	...	.01½
SILICA Crude, bulk, mines	ton.	6.00	7.00
Refined, floated, bags	ton.	15.00	30.00
Air floated, bags	ton.	32.00	50.00
Extra, floated, bags	ton.	55.00	65.00
SILVER, metal, American oz.	oz.	...	.64⅞
Soap, Castile, 40 lb bxs	lb.	.20	.25
Powd. USP, 250 lb bbls	lb.	.28	.30
Green, USP, 450 lb bbls	lb.	.07½	.08½
SODA ASH, 58% light 1-4 bags delivered NY 100 lb.		...	2.19
5 & Up bgs., del'd. NY 100 lb.		...	2.04
1-4 bbls. delvd. NY 100 lb.		...	2.44
5 & Up bbls delv'd. NY 100 lb.		...	2.39
Contract, Basis 58% light c-l bags wks 100 lb.		...	1.38
58% dense c-l bgs wks 100 lb.		...	1.50
Prompt and spot, basis 58% light bgs c-l wks 100 lb.		...	1.43
58% dense c-l bgs wks 100 lb.		...	1.45
Prompt and spot basis 58% c-l wks 100 lb.		...	1.50

Pyridine—Very few sales are reported due to the continued unsettled condition of the alcohol market. Spot quotations are nominally unchanged at $4.00@$4.10 gal. and shipment is quoted at $3.85 gal.

Potassium Carbonate—Demand is of good volume and prices are firm at last week's advance to 5⅝c@5¾c lb for 80-85% calcined; 5⅝c@5½c lb for 80-85% hydrated; 6¼c@6½c lb for 90-95%; and 6¾c@7c lb for 96-98%.

Potassium Permanganate—Stocks are plentiful and competition is keen. General quotations are given at 14c@14½c lb as to quantity, but offerings were made in some instances during the week at 13¾c@13⅞c lb ex-store for fair-sized quantities.

Sodium Acetate—Market is firmer although quotations remain at 4½c@5c lb as to quantity. Stocks have been reduced considerably.

Sodium Naphthionate—Market is sharply competitive although open quotations show no variation.

Sodium Nitrate—Has shown no change and the market lacks snap. Some sales are being made at the scheduled price, but in general factors seem to be awaiting the outcome of the Chilean conference.

Sodium Prussiate—Makers are in control of the market, which is steady at unchanged prices of 10c@10½c lb as to quantity.

Sodium Sulfate—Anhydrous material is steady at 2¼c@2¾c lb as to quantity from makers.

Sodium Sulfide—Competition is sharp due to stocks being of generous proportions. Open quotations are unchanged.

Sodium Sulfite — Only barely steady at 8½c@9c lb.

Solvent Naphtha—Market is easy but quotations are firm and unchanged in all directions.

Toluene—Easy condition continues. Leading distributors remain firm in their quotations and some improvement in demand is reported for the past week.

Xylene—Market is in an easy condition on all grades. Spot tanks of commercial and 5° are available for prompt shipment. No weakness is apparent in the price situation, however, and leading factors quote firm unchanged prices.

SODA CAUSTIC, 76% solid 1-4 drums delv'd, NY 100 lb		...	3.91
5 & Up drs del. NY 100 lb.		...	3.76
Ground & Flake 76% 1-4 drms, del., NY 100 lb.		...	4.31
5 & Up drs del. NY100 lb.		...	4.16
1-4 bbls del. 100 lb.		...	4.56
5 & Up bbls del. 100 lb.		...	4.41
Contract basis 76% c-l wks 100 lb.		...	3.10
Pmpt., and spot Basis 76% c-l wks 100 lb.		...	3.20
Contract 74% low grade c-l wks flat 100 lb.		...	3.02
Ground & Flake, 76% pmpt. and spot, wks c-l drs 100 lb.		...	3.60
USP, stick, 10 lb cans	lb.	.19	.21
Pure, stick, by alcohol	lb.	.25	.27
Soda Sal, see Sodium Carbonate			
Sodium Metal, 12½ lb. bricks	lb.	...	.27
SODIUM ACETATE, crys., 450 lb bbls wks	lb.	.04½	.05
Aluminate, 500 lb bbls wks	lb.	.07½	.08
Aluminum Sulfate, see Alum Soda			
Arsenate, 4 lb mtl. wks drms gal.		.50	.60
Drums, 8 lb material, wks gal.		1.00	1.20
Benzoate, USP, 100 lb bbls	lb.	.50	.55
Bicarbonate, 400 lb bbls NY 100 lb.		...	2.41
Bbls c-l wks 100 lb.		...	2.00
112 lb kegs c-l wks	lb.	...	2.25
112 lb kegs NY 100 lb.		...	2.66
Bichromate, 500 lb casks wks	lb.	.08¾	.08¼
Bisulfite, dry powder 500 lb bbls wks	lb.	...	.08½
Imported	lb.	...	.08
BROMIDE, USP 450 lb bbls	lb.	.48	.49
Cases, 50 lb	lb.	.48	.49
Imp., USP, 220 lb cases	lb.	.44½	.45
Bromate, 100 lb cs	lb.	...	1.15
Carbonate Sal Soda 350 lb bbls lc-l NY 100 lb.		1.30	1.35
Works c-l 100 lb.		1.10	1.30
Monohydrate, 400 lb. bbl. lc-l NY 100 lb.		...	2.40
Pure photographic 100 lb.			
Imported, 112 lb. kegs	lb.	.06¼	.06½
Chloride, tech	ton.	13.00	13.00
CP, 300 lb. bbls	lb.	.06	.06
Chlorate, 112 lb kegs wks	lb.	.06¼	.06½
kegs	lb.	.06	.08
Chromate 800 lb bbl	lb.	...	.08
Cyanide 96-98% 100 & 250 lb. drums wks	lb.	...	.20
c-l wks	lb.	...	.19
Imp., 95-97% 100 lb drs	lb.	...	.19
c-l wks	lb.	...	.18
Fluoride, 300 lb bbls, wks	lb.	.08¾	.09
Imp., 700 lb cks	lb.	.09	.10
Hydroxide, see Soda Caustic			
Hypochlorite Soln 100 lb cbys	lb	...	.05
14½ soln., 50 lb cbys	lb.	...	.04
Hydrosulfite, 200 lb., bbls fob wks	lb.	.23	.24
Fur Stripping 50 cans	lb.	.20	.25
HYPOSULFITE, tech., pea crys. 375 lb bbls., wks 100 lb.		2.65	3.05
Bbls. c-l wks 100 lb.		...	2.50
100 lb. kegs wks 100 lb.		2.80	2.90
Imp. 100 lb.		2.75	3.00
Regular crys., bbls. wks 100 lb.		2.40	2.65
Bbls., c-l wks 100 lb.		2.40	2.50
Kegs, wks 100 lb.		2.35	2.45
Imp. 100 lb.		2.35	2.45
Metanilate, 150 lb bbls	lb.	.70	.75
Molybdate 100 lb kegs	lb.	...	1.10
Naphthionate, 300 lb. bbls	lb.	.55	.57
Nitrate crude, 95% 200 lb bgs c-l NY 100 lb.		...	2.33
Aug Shipment 100 lbs.,		...	2.33
Double Refined 400 lb bbls. Gran. c-l wks	lb.	...	.03¾
Nitrite 500 lb bbls spot makers	lb.	...	.09
Imp., 650 lb casks	lb.	.08¾	.09
Ortho-Chloro-Toluene Sulfonate 175 lb bbls, wks	lb.	.25	.27
Oxalate, neutral, 100 lb. kegs	lb.	.20	.23
Perborate, 275 lb bbls	lb.	.21	.22
Imp., 225 lb drs	lb.	.21	.22
Peroxide, 200 lb cases	lb.	...	.27
Phosphate, di-sodium tech 550 lb. Bbls 100 lb.		3.25	3.55
Imp., 100 lb.		3.12½	3.15
USP, Gran., 275bbls	lb.	.07	.07½
Imp, Gran.	lb.	.04½	.05¼
USP, Cryst. 275 bbls	lb.	.07½	.08
Mono-sodium 100 lb kegs	lb.	.30	.31
Tri-sodium tech c-l bbls 100 lb.		...	3.90

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Solvay Sodium Nitrite
Solvay 58% Soda Ash
Dense—Light
Solvay Fluf (Extra Light Soda Ash)
Solvay 76% Caustic Soda
Solid—Flake—Ground
Solvay Super Alkali
Solvay Snowflake Crystals
(Trademark Registered)
Solvay Laundry Soda
Solvay Cleansing Soda
Solvay Tanners Alkali
Solvay Tanners Soda
Solvay Liquid Caustic Soda
Solvay Calcium Chloride 73%—75%

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Sodium Picramate
Toluene

Chemicals

Toluidine
Corn Oil, Crude

SODIUM (Continued)			
Picramate, 100 lb. kegs	lb.	...	.69
Para-Toluene Sulfonate 175 lb bbls	lb.	.08	.09
PRUSSIATE, yellow, 350 lb bbls. wks	lb.	.10	.10½
Imp., 50 lb cks	lb.	.10	.10½
Pyrophosphate, 100 lb kegs	lb.	.13½	.14
Salicylate, 100 lb. kegs	lb.	.37	.38
Silicate, 40° turbid, tanks wks	100 lb.	...	.75
55gal. drums wks	100 lb.	.85	1.10
40° clear, tanks wks	100 lb.	...	1.10
55gal. drs, wks	100 lb.	1.20	1.45
42° turbid tks., wks	100 lb.	...	.80
55gal. drs wks	100 lb.	.90	1.15
42° clear, tanks, wks	100 lb.	...	1.25
55gal. drs., wks	100 lb.	1.35	1.75
Silicofluoride, 450 lb bbls NY	lb.	.04¼	.04½
Stannate, 100 lb drums	lb.	.41½	.42
Sulphate, see Glauber's Salt			
Sulfate, Anhydrous 550 lb bbls. c-l wks	lb.	.02¼	.02¾
Imp., 250 lb bbls	lb.	.01¾	.02
Sulfide, 60% solid, 650 lb drs. lc-l wks	lb.	.03¼	.04
Drs., c-l wks	lb.	...	.03½
Imp., 700 lb drs NY	lb.	.03	.03½
60% brkn, 650 lb drs wks	lb.	.04	.04¼
Drs. c-l wks	lb.	...	.03¾
30% crys., 440 lb bbls wks	lb.	.02½	.02¾
Imp. 400 lb bbls	lb.	.02¼	.02½
Sulfite, cryst., 400 lb bbls wks	lb.	.03¼	.03½
Anhydrous, USP, 100 lb kgs	lb.	.08½	.09
Sulfocarbolate, USP, 100 lb kgs	lb.	.32	.34
Sulfocyanide, 400 lb bbls	lb.	.40	.45
Tungstate, cryst., 100 lb kegs	lb.	.80	.82½
SOLVENT NAPHTHA, 110gal. drs, wks	gal.	.40	nom.
8,000gal tnk crs wks	gal.	.35	nom.
STRONTIUM, Bromide, USP, 50 lb. kegs	lb.	.51	.53
Carbonate NF 600 lb bbls wks	lb.	...	.30
100 lb kgs, wks	lb.	...	.08
Nitrate, 600 lb bbls NY	lb.	.08	.08⅛
Imported, bbls NY	lb.	.08	.08½
SULFUR			
Crude, fob., mines	ton	18.00	19.00
Brimstone Broken Rock 250 lb bgs c-l	100 lb.	...	2.05
Less c-l bbls NY	100 lb.	2.30	2.55
Roll, 500 lb bgs c-l NY 100 lb		...	2.35
Less c-l bbls NY	100 lb.	2.60	2.85
Flour, Heavy bgs c-l	100 lb.	...	2.50
Light, 100% bags c-l 100 lb.		...	2.60
Rubbermakers 100% .240 lb. bbls., c-l bags NY 100 lb.		...	2.60
Comm'l 99% c-l 150 lb bgs. NY	100 lb.	...	1.45
For Dusting, c-l 99% 100 lb. bags, NY	100 lb	...	2.40
Flowers, 100% 155 lb bbls. NY c-l	100 lb.	...	3.45
Precipitated 125 lb bbls NY	lb	...	.17
Lac., 125 lb bbls NY	lb.	...	.12
Sulfur Chloride, red, 700 lb drs. wks	lb.	.05	.05½
150 lb cbys wks	lb.	...	.06¼
Yellow, 700 lb drs wks	lb.	.03¾	.04½
Sulfur Dioxide, 100 lb cyl	lb.	.17	.19
Sufuryl Chloride, 600 lb drs.	lb.	.65	.70
Tar Coke Oven, Tks., wks	gal.	.07	.08
Water Gas, Tks., wks	gal.	...	.08
Terra Alba No 1 300 lb bbls 100lbs		1.85	1.90
Tetralene, 50gal. drs wks	lb.	...	.20
Thiocarbanilid, 170 lb bbls	lb.	.24	.26
TIN, metal Straits NY	lb.	...	.58½
99% American NY	lb.	...	.63¼
Bichloride, 50% sol'n. 100 lb. bbls wks	lb.	...	.17
Crystals, 500 lb bbls., wks	lb.	...	.41½
100 lb kegs wks	lb.	...	.42
Oxide, 300 lb bbls wks	lb.	...	.64
100 lb kegs wks	lb.	...	.66
Recovered bbls	lb.	...	.59
Tetrachloride, 100 lb drs wks	lb.	...	.34½
Titanium Oxide bbls., wks	lb.	.13	.14
Tolidine, 350 lb bbls	lb.	.90	.94
Sulfate, 350 lb bbls	lb.	.80	.85
Toluene, 8,000gal. tnk cars wks	gal.	...	.35
110gal. drs wks	gal.	...	.40
Nitration, Tank cars wks	gal.	...	.37
Drums wks	gal.	...	.42
Non-corrosive, tnk crs wks	gal.	.36	nom.
Drums, wks	gal.	.41	—

OILS AND FATS

Chinawood Oil—Prices are well maintained at the quoted level, and though the principal buying is still confined to dealers in this market, a better consuming interest is noted.

Coconut Oil—Activity has slowed up somewhat and an easier undertone is apparent. Ceylon oil is offered at 11c@11½c lb spot in bbls. and correspondingly lower in tanks.

Cod Oil—Parcels are moving in a routine manner at unchanged figures.

Corn Oil—Has passed through a featureless week on a light inquiry for all grades and with a softness noted in all grades.

Cottonseed Oil — Is passing through a dull period. Small trading is being done and an easier trend has set in. Crude at the mills is quoted at 12½c@13c lb.

Greases—While a better demand is in evidence for all greases prices are at slightly lower levels for choice white. On the other hand yellow, house and brown are quoted ¼c lb higher this week.

Lard Oil—Is again offered at reduced figures on spot with the market quiet and soft. Edible prime is quoted at 18¼c@18½c lb with off prime at 14¾c lb. The other grades are generally unchanged.

Linseed Oil—Crushers have again advanced their prices. 12c lb is quoted for July-Aug. deliveries and indications are that further advances will follow. Five bbls. spot lots are being traded in at 12.4c lb. A better inquiry is contributing to the strength of the market.

Menhaden Oil — Reports from Baltimore are to the effect that this season's catch will show very small oil yields. Sellers here do not anticipate any marked advance in price, although a firmness is expected to prevail. Sales are reported for crude in tanks at Baltimore at 47½c@48c gal. Other grades are quiet and steady.

Neatsfoot Oil—Is steady at its present level with sellers reporting a better sales volume for all grades.

Oleo Oil—No. 1 oil is reduced this week with factors quoting 13¼c

Toluidine, Mixed, 900 lb drs wks	lb.	.31	.32
Toner Lithol Red bbls	lb.	.85	.90
Para Red bbls	lb.	.75	.80
Toluidine,	lb.	1.75	1.80
Triacetin, 50gal. drs wks	gal.	3.60	3.90
Tribromphenol, 100 lb cases	lb.	...	1.10
Triphenylguanidine	lb.	.70	.75
Triphenyl Phosphate, 450 lb bbls	lb.	...	.75
Tungsten, NY	WOunit	10.50	11.00
Ultramarine Blue	lb.	.15	.25
Urea, Pure, 112 lb cases	lb.	.18	.20
Venetian Red	lb.	...	.60
Vermilion Amer., 100 lb kegs	lb.	.35	.40
English kegs	lb.	1.45	1.50
WHITE LEAD, see lead, white			
XYLENE, 3° dist. range nitration 110gal. drs., NY	gal.	70	nom.
5° dist. range, 8,000gal. tanks wks	gal.	.55	nom.
110gal. drs wks	gal.	.60	nom.
10° dist. range drums, wks	gal.	.55	nom.
Tanks wks	gal.	.50	nom.
Com'l. 110 gal drs. wks	gal.	.41	nom.
Tanks wks	gal.	.36	nom.
Xylidine crude	lb.	...	.35
Refined	lb.	.38	.40
ZINC. METAL, high grade slabs c-l NY	100 lb.	8.47½	8.50
Ammonium Chloride, powd. 400 lb. bbls	lb.	...	.06¼
Carb., tech. bbls NY	lb.	.09¼	.10
USP, 100 lb kegs	lb.	...	.20
Chloride, fused 600 lb drs wks	lb.	...	.06
Drs. c-l wks	lb.	...	.05½
Granulated, 500 lb bbls wks	lb.	.06¼	.06½
Imported dr NY	lb.	.06¼	.06¾
Solution 50% tnks wks 100 lb.		...	3.00
Cyanide, 100 lb. drs	lb.	.40	.41
Dust, 100 lb. tins wks	lb.	...	.10
500 lb bbls kegs c-l wks	lb.	...	.09
500 lb bbls kegs lc-l wks	lb.	...	.09½
Oxide, Amer., Bags wks	lb.	.07½	.07⅝
Amer 300 lb. bbls wks	lb.	.07⅝	.07⅞
French, 300 lb bbls wks	lb.	.10¾	.12½
Bbl. c-l wks	lb.	.10¾	.12¾
Bags c-l wks	lb.	.10⅛	.12½
USP, 100 lb bbls c-l	lb.	...	.14
10-25 bbl lots	lb.	...	.15
5bbl lots	lb.	...	.16
1bbl lots	lb.	...	.17
Imported, white seal, bbls	lb.	.12	.13½
Green seal, bbls	lb.	.11½	.12
Red seal, bbls	lb.	.10½	.11
Stearate, USP, 50 lb bbls	lb.	.21½	.24
Sulfate, 400 lb bbls wks	lb.	.03	.03⅛
Bbls c-l wks	lb.	...	.02⅛
USP, 100 lb bbls	lb.	.08	.09
Sulfide, 500 lb bbls	lb.	.30	.32
Sulfocarbolate, 100 lb kegs	lb.	.29	.30
Ziconium, oxide, pure	lb.	.45	.50
Semi-refined bags	lb.	.08	.10
Natural, bags	lb.	.02½	.03

Oils & Fats

Castor, No. 1, 400 lb bbls	lb.	.13	.14
80 lb cases	lb.	.14	.14½
No. 3	lb.	.12½	.13
Blown, 400 lb bbls	lb.	...	.18
China Wood bbls spot NY	lb.	.15½	.16
Tanks, Spot NY	lb.	.13	.13¼
Coast tanks	lb.	.11⅞	.12
Coconut Ceylon 375 lb bbls NY	lb.	.11	.11¼
8,000gal. tanks NY	lb.	.10	.10½
Cochin, 375 lb bbls NY	lb.	.12	.12¼
Tanks, NY	lb.	...	.11
Manila bbls NY	lb.	.11⅛	.11¼
Tanks, NY	lb.	...	.10
Tanks Pacific Coast	lb.	.09½	.09⅝
Edible bbls NY	lb.	.13½	.14
Cod Newfoupndland, 50gal bbls	gal.	.60	.64
Tanks, NY	gal.	.55	.57
Cod Liver, see Cod Liver Oil under Chemicals			
Copra, bags	lb.	.06	.06¼
Corn, ref., 375 lb bbls NY	lb.	.14½	.15
Tanks	lb.	.12¼	.12½
Crude tanks mills	lb.	.12	.12¾
Bbls NY	lb.	...	.14

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Whale Oil, Crude

Oils & Fats

Yolk Oil
Glue

Cottonseed Crude, mill	lb.	.12½	.13
PSY 100bbls NY spot	lb.	.14½	.14¾
May-Dec	lb.	.11½	.12
White, 100 bbls lots NY	lb.	...	.13⅛
Winter yellow 100bbls NY	lb.	...	.14
Degras, Amer., 50gal. bbls NY	lb.	.04¼	.04½
English, light bbls NY	lb.	.05¼	.05½
Brown, bbls NY	lb.	.04⅞	.04⅞
Light brown, bbls NY	lb.	.04½	.04⅝
Dark, bbls NY	lb.	.03½	.04
Neutral, bbls NY	lb.	.97½	.12
Moellon, bbls, NY	gal.	...	.50
Greases choice white bbls NY	lb.	.11	.11½
Yellow	lb.	...	.08¾
House	lb.	...	.08¼
Brown	lb.	...	.07¾
Herring, Tanks, Coast	gal.	nom.	nom.
Horse, 375 lb bbls NY	lb.	.10	nom.
Lard, prime steam bbls	lb.	.15	.15⅛
Compounds, bbls	lb.	.13¾	.14
LARD OIL, edible prime	lb.	...	.18¼
Off prime bbls	lb.	...	.14¾
Extra bbls	lb.	...	.14¼
Extra No. 1, bbls	lb.	...	.12¼
No. 1 bbls	lb.	...	.11¾
No. 2, bbls	lb.	...	.11½
LINSEED, raw c-l bbls spot	lb.	...	12.0
Five bbls raw	lb.	...	12.4
Tanks, raw	lb.	...	10.5
Bld., 5bbl lot wks	lb.	...	11.9
Dbl. boiled 5bbl	lb.	...	12.0
July-Dec. c-l wks	lb.	...	12.4
Imported bbls NY	gal.	...	...
Tanks, NY	gal.	...	...
Menhaden, crude tanks, Balt	gal.	nom.	nom.
Light pressed, bbls NY	gal.	.65	.67
Yellow, bleached bbls NY	gal.	.68	.70
Extra bleached bbls NY	gal.	.70	.72
Blown bbls NY	lb.	...	.10
Mineral Oil, white, 50gal. bbls	gal.	.80	.90
Russian gal.	gal.	.95	1.00
Neatsfoot 20° ct., bbls NY	lb.	...	.18¾
Pure bbls NY	lb.	...	.16¼
Extra bbls NY	lb.	...	.12¼
No. 1, bbls NY	lb.	...	.11¾
CP bbls NY	lb.	...	.18¾
Oleo Oil, No. 1, bbls NY	lb.	.13¼	.13½
No. 2 bbls NY	lb.	...	.12
No. 3, bbls NY	lb.	...	.10¼
OLIVE, denatured bbls NY	gal.	1.15	1.20
Edible, bbls NY	gal.	...	1.85
Foots bbls NY	lb.	.08⅛	.08⅜
Shipments	lb.	.08⅛	.08¼
Palm Lagos, 1,500 lb casks	lb.	.08¾	.09
Niger casks	lb.	.08⅝	.08½
Benny Old Calabar casks	lb.	...	.08⅛
Palm Kernel bbl NY	lb.	.11	.11¼
Casks	lb.	.10¾	.11
Peanut refined bbls NY	lb.	.16½	.17
Crude, mills buyers' tks	lb.	...	.13
Crude, bbls, NY	lb.	...	.14½
Perilla bbls NY	lb.	.13¼	.14
Tanks, NY	lb.	.11⅛	.11¾
Poppyseed, bbls NY	gal.	1.70	1.75
Rapeseed, bbls NY Japanese	gal.	.88	.89
English	gal.	.94	.96
Blown bbls NY	gal.	1.10	1.12
Red Oil, distilled bbls	lb.	.10	.10½
Tanks	lb.	...	.09¾
Saponified, bbls	lb.	.10½	.11
Tanks	lb.	...	.09¾
Salmon, 8,000 gal. tks Coast	gal.	.50	nom.
Sardine, Tanks, Pacific Coast	gal.	...	.57
Sesame, edible yellow bbls	lb.	.15	.15½
White	lb.	.16	.16¼
Sod Oil, bbls, NY	gal.	...	.40
SOYA BEAN, crude tks Pac Cst	lb.	.10¾	.11
Crude, tks., NY	lb.	...	.11¼
Crude, bbls., NY	lb.	.12½	.13
Refined bbls NY	lb.	...	.13
Sperm, 38° ct., blchd. bbls NY	gal.	.85	.86
45° cold test blchd bbls NY	gal.	.83	.84
STEARIC ACID,			
Double pressed, bags dist.	lb.	.14	.14¾
Double pressed, bgs saponified	lb.	.14	.14½
Carlots	lb.	...	.13½
Triple pressed bgs, dist.	lb.	.16¼	.16¾
Carlots	lb.	...	.16¼
Stearine Oleo bbls	lb.	...	.13½
Tallow edible, tierces	lb.	...	.11
City Extra loose	lb.	.08⅝	.08¾
Tallow Oil, acidless tks., NY	lb.	.11	.11¼
Bbls c-l NY	lb.	...	.11¼
Whale, nat winter bbls NY	gal.	.76	.78
Blchd, winter bbls, NY	gal.	.78	.80
Extra blchd, bbls, NY	gal.	.80	.82
Crude No. 1, tanks coast	gal.		
Crude No. 2, tanks coast	gal.		
Crude No. 3, tanks coast	gal.		

@13¾c lb spot. The market is dull and featureless.

Olive Oil—Foots are quoted lower both on spot and for shipment with these prices on a par at 8⅛c lb. Consuming interest is light. Denatured and edible oil are steady and unchanged.

Palm Kernel Oil—Slightly lower in casks on spot on a slackened inquiry. The market is quiet.

Peanut Oil — Crude continues firm and is maintaining its position, although it has not shown further advances. A good interest is noted.

Sesame Oil—Quiet and a shade easier on spot for edible yellow in barrels.

Stearine Oleo—Quoted lower at 13½c@13¾c lb with sellers reporting a better movement into consumption.

Tallow—Extra loose has reacted upward on a better inquiry and is quoted higher this week at 8⅝c@8¾c lb.

INDUSTRIAL RAW MATERIALS

Albumen—Edible egg has eased off on spot and for shipment and is now quoted at 98c@$1.00 lb spot and slightly lower for forward positions. The good consuming interest noted of recent weeks has slowed up and the inquiry is now routine.

Blood—Dried on spot continues to be sold at the recent advance to $4.00 unit. Chicago is firm and higher at $4.50 unit with South American unchanged at $4.00 unit. Demand is good, although not so brisk as a few weeks ago.

Damar Gum—Higher on spot with dealers in this market naming 27c@28c lb on Batavia as the inside price. Stocks are small.

Divi Divi—Fairly active with other tanning materials, but unchanged as to price.

Egg Yolk—Continues firm and upward. Shipment prices are heard at 60c lb with small spot offerings at 65c@68c lb.

Elemi Gum—Market quiet and prices are easy this week. Current quotations are: No. 1, 15c@16c lb; No. 2, 14c@15c lb; No. 3, 13c@14c lb.

Yolk Oil, bbls	lb.		
Turkey Red, Oil, single bbls	lb.	.11	.13
Double	lb.	.14	.16
Walnut, crude bbls NY	lb.		

Industrial Raw Materials

Albumen, Egg edible	lb.	.98	1.00
Tech., 100 lb drs	lb.	.95	.98
Blood, 225 lb bbls	lb.	.59	.60
Vegetable edible	lb.	.60	.65
Technical	lb.	.50	.55
Ammonium Sulfate, See Chemicals			
Annatto, fine	lb.	.41	.48
Archil, double 600 lb bbls	lb.	.13	.14
Triple, 600 lb bbls	lb.	.16	.17
Cone, 600 lb bbls	lb.	.18	.20
Asbestine, c-l	ton.	16.60	18.00
le-l	ton.	20.00	22.00
Bees Wax, white cases	lb.	.59	.60
Yellow, refined cases	lb.	.48	.49
Crude, bags	lb.	.41	.46
Commercial, cs.,	lb.	.27	.28
Blood dried fob NY	unit	...	3.75
Chicago	unit	...	4.25
S. Am., Shipment	unit	...	4.00
Bone Raw, Chicago	ton	...	32.00
Bone Meal 3 & 50 Chicago	ton	32.50	33.00
Bone Ash, 100 lb kegs	lb.	.06	.07
Black, 200 lb bbls	lb.	...	.08¾
Candelilla Wax, bags	lb.	.36	.38
Carnauba Wax, Flor., bags	lb.	.50	nom.
Powd.	lb.	.50	nom.
No. 1, Yellow bags	lb.	.48	.49
No. 2, regular bags	lb.	.43	.44
No. 2, N. Country bags	lb.	...	nom.
No. 3, N Country bags	lb.	.36	.38
No. 3, chalky bags	lb.	.36	.38
CHARCOAL			
Hardwood, lump, bulk wks	bu.	.18	.19
Spot NY	bu.	.24	.26
Wood, powd., 100 lb bbls	lb.	.04	.05
Willow, powd 100 lb wks bbls	lb.	.06	.06¼
Chestnut, clarified, 25% tks, wks	lb.	.01½	.01¾
Bbls., wks	lb.	.02½	.02¾
Powd., 60% 100 lb bags wks	lb.	.05½	.05¾
Decolorized bags wks	lb.	.06½	.07
Cudbear, English	lb.	.17	.18
Cutch Rangoon 100 lb bales	lb.	...	.18
Tablets, 120 lb boxes	lb.	.13	.14
Borneo solid, 100 lb bales	lb.	.05½	.05¾
Cyanamide, bulk c-l wks Amm unit.		1.90	2.05
Imp. Amm unit.		2.00	2.30
Dextrin, white corn 140 lb bags, c-l 100 lb.		...	3.77
bags c-l 100 lb.		...	3.87
Canary 100 lb.		...	3.82
bags le-l 100 lb.		...	3.92
Potato, white 220 lb bags le-l	lb.	...	.08¼
Yellow, 220 lb bags	lb.	...	.08¼
Tapioca, 200 lb. bags l-el	lb.	.07¾	.08¾
Divi Divi Extract	lb.	.04	nom.
Pods, bags ship	ton	40.00	41.00
EARTH, Diatomaceous, see Kieselguhr			
Egg Yolk, 200 lb. cs	lb.	.65	.68
Ester Gums			
Dark, 280 lb. bbls.,	lb.	.13¾	.14
Light, 280 lb. bbls.,	lb.	.14	.14¼
Fish Scrap, dried wks	unit	4.00 &	.10
Acid Bulk 7 & 3½, Deliv. Norfolk & Balt basis	unit	3.50 &	.50
Flavine Lemon 55 lb cs	lb.	.90	.95
Orange 70 lb cs	lb.	.85	.90
Fossil Flour	lb.	.03½	.04
Fustic, solid 50 lb boxes	lb.	.20	.23
Crystals, 100 lb boxes	lb.	.20	.22
Liquid, 51°, 600 lb bbls	lb.	.09	.10
Fustic, sticks	ton.	30.00	32.00
Chips	lb.	.04	.05
Gall extract	lb.	.20	.21
Gambier 25% liq., 450 lb bbls	lb.	.12	.14
Common 200 lb cases	lb.	.08	.09
Singapore cubes, 150 lb bags	lb.	...	.23
Gelatin, Technical 100 lb cs	lb.	.45	.50
Glucose, (Grape Sugar) dry 70° bags c-l NY	100 lb.	3.14	3.24
80° bags c-l NY	100 lb.	3.24	3.34
Tanners' Spcl 100 lb bgs 100 lb.		...	3.14
GLUE, pure white bbls	lb.	.22	.26
Medium white, bbls	lb.	.20	.24
French bbls	lb.	.18	.23
High Grade, bbls	lb.	.35	.40
Bone, regular, bbls	lb.	.10	.12
Fish, bbls	gal.	1.50	1.75
Hide bbls	lb.	.14	.24

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Gums
Oak Bark

Industrial Raw Materials

Osage Orange
Whiting

GUM, Accroides, Red, coarse and fine, 140-150 lb bags	lb.	.03¼	.04½
Powdered, 150 lb bgs.	lb.	.06	.06½
Accroides, Yel. 150-200 lb bgs	lb.	.18	.20
Animi (Zanzibar) Bean and pea 250 lb. cases	lb.	.40	.45
Glassy, 250 lb cases	lb.	.60	.65
Asphaltum, Barbadoes, Manjak 200 lb bags	lb.	.09	.12
Egyptian, 200 lb. cases	lb.	.15	.17
Gilsonite selects 150 lb bgs	ton	55.00	60.00
Benzoin, Sumatra, Tech., 120 lb cases	lb.	.30	.32
Copal, Congo, 112 lb bags Water White,	lb.	.35	.36
Light Amber,	lb.	12½	.14
Dark Amber,	lb.	08¾	.09
Clean Opaque	lb.	.12	.13
Copal, East Indian 224 lb. cases, 180 lb bags— Pale, E. I. Bold	lb.	.18	.18½
Pale, E. I. Chips	lb.	.06½	.07
180 lb. bags— Copal, Manila, 180-190 lb. baskets— Pale Bold, Loba A.	lb.	.16	.16½
Pale Bold, Nubs, Loba B	lb.	.15	.15½
Pale, Bold, Loba C	lb.	.14½	.15
Pale Nubs, P.N.	lb.	.14	.14½
Pale Bold, 224 lb cases	lb.	.16	.18
Copal, Pontianak 224 lb cases— Pale, Bold, genuine No. 1	lb.	.28	.28½
Pale, genuine split chips	lb.	.19	.19½
Damar, Batavia, standard, 136 lb. cases	lb.	.27½	.28½
Batavia E Seeds 136 lb cases	lb.	.18	.18½
Batavia, F Splinters, 136 lb. cases and bags	lb.	.09	.09½
Batavia, Dust 160 lb bags	lb.	.07	.07½
Singapore No 1 224 lb cs	lb.	.34	.35
Singapore No. 2 224 lb cases	lb.	.21	.21½
Singapore No. 3 180 lb bgs	lb.	.07	.07¼
Elemi, No. 1 80-85 lb cs	lb.	.15	.16
No. 2 80-85 lb cases	lb.	.14	.15
No. 3, 80-85 lb cases	lb.	.13	.14
Kauri No. 1 224-226 lb cases	lb.	.67½	.68
No. 2, fair pale 224-226 lb cases	lb.	.44½	.45
Bush Chips, 224-260 lb. cases	lb.	.38	.40
Pale Chips, 224-260 lb cases	lb.	.24½	.26
Brown Chips, 180-200 lb. bags	lb.	.14½	.16
Sandarac, Prime quality 220 lb. bags and 300 lb casks	lb.	.27	.28
Graphite, crude, 220 lb bags	ton.	15.00	35.00
Flake, 900 lb bbls	lb.	.05	.09
HEMATINE, Paste, 800 lb bbls	lb.	.09	.12
Crystals, 400 lb bbls	lb.	.12	.20
Hemlock, 25% 600 lb bbls wks	lb.	.03½	.03¾
Bark,	ton.	...	16.00
Hypernic, 51° 600 lb bbls	lb.	.12	.15
Indigo Madras bbls	lb.	1.28	1.30
20% paste drums	lb.	.14	.15
Japan Wax, 224 lb cs	lb.	.17¼	.17½
KIESELGUHR, 95 lb bags NY	ton	60.00	70.00
Larch 25% 600 lb bbls wks	lb.	.03¾	.04
Powd. 100 lb. bags wks	lb.	.08	.09
Logwood 51° 600 lb bbls	lb.	.08¼	.08½
Lower grades	lb.	.07½	.08
Solid, 50 lb boxes	lb.	.12	.15
LOGWOOD, sticks	ton.	26.00	27.00
Chips, 150 lb bags	lb.	.03	.03½
Madder, Dutch	lb.	...	.30
Mangrove, 55% 400 lb bbls	lb.	.03½	nom.
Mangrove, bark, African	ton.	...	39.00
Marble Flour, bulk	ton.	10.00	12.00
See also Calcium Carbonate under Chemicals			
Montan Wax, crude bags	lb.	.06½	.07
Bleached bags	lb.	.25	.28
Myrobalans, 25% liquid bbls	lb.	.04	.04½
50% solid, 50 lb boxes	lb.	.08	.08¼
Myrobalans, bags J1	ton	45.00	46.00
R2	ton.	...	...
New crop	ton.	29.50	30.00
J2	ton.	...	...
New crop	ton	29.50	31.00
Nitrogenous Material bulk,	unit	...	3.60
NUTGALLS, Chinese, bags	lb.	.17	.18
Aleppy bags	lb.	.25	nom.
Powd. bags	lb.	.23	.24
Oak bark, whole	ton.	20.00	23.00
Ground	ton.	45.00	50.00
Oak, tanks, wks	lb.	...	.03½
23-25% liq. 600 lb bbls wks	lb.	.04	.04½
Solid, powd.	lb.	.07½	.08

Fish Scrap—Little activity noted as yet. Prices are unchanged on this market, with reports still pointing to a small catch this season.

Mangrove Bark—Shipment prices are easier with factors here quoting $39.00@$40.00 ton. Demand is routine.

Myrobalans — Considerable interest is displayed for the first time in months in this item. J2's in particular are in demand and good sales are reported at $29.50@$31.00 ton. R2 is also in some demand with J1 quiet on spot but higher for shipment at $45.00@$46.00 ton.

Rosins—A firm tone is noted in the spot market this week. The opinion is expressed that the position will continue strong as a healthy inquiry is noted with stocks none too large in any quarter. Current quotations on spot are: B, $13.50; D, $13.75; E, $14.00; F, $14.25; G, $14.40; H, $14.50; I, $14.55; K, $14.60; M, $14.65; N, $15.35; WG, $15.85; WW, $16.05.

Sandarac Gum—Easy in all quarters with the inquiry light and stocks in good supply on this market.

Tankage—Again higher on spot. Sales are being made at $4.25 and 10c unit and most sellers are holding for higher figures at this writing. Chicago and South American markets are both firm and the trend is upward. Tankage is easily the firmest spot in the entire fertilizer market.

Turpentine — Slightly higher prices are noted this week. The demand is not large, consisting of small buying to meet immediate needs. Receipts are moving quite freely into the primary markets but the price is well maintained in all directions.

Sumac—Is quiet and somewhat lower for shipment at $82.00 ton. Spot sales in a small way are reported at $93.00 ton.

Valonia—A lively interest is noted for cups and mixtures. Tanners seem more disposed to anticipate their needs for some months ahead as they are buying more freely for Sept.-Oct. delivery at sellers' figures.

Wattle Bark—Quoted higher for shipment with increased sales reported on the basis of $4.50 ton for shipment parcels.

Osage Orange 51° liquid	lb.	.07	.07½
Powd. 100 lb bags	lb.	.14½	.15
Crystals	lb.	.16	.17
Paracoumarone, 230 lb. drums	lb.	.12	.15
Paraffin, ref'd. 200 lb. cs slabs 118-120 deg. M.P.	lb.	.08	.09
123-127 deg. M.P.	lb.	.06½	.06¾
128-132 deg. M.P.	lb.	.07½	.07¾
133-137 deg. M.P.	lb.	.08	.08½
138-140 deg. M.P.	lb.	.08¾	.10
Phosphate Acid, 16% Bulk wks	unit	.62½	.65
Phosphate Rock, fob., mines Florida Pebble 68%	ton.	3.15	3.40
Florida Pebble 70%	ton	3.65	3.75
Florida Pebble 72%		4.00	4.15
Florida Pebble, basis 75%-74%		...	5.50
Florida Pebble, 75%		...	5.75
Florida Pebble, basis, 77%-76%		...	6.25
Tennessee, 72%	ton.	...	5.50
Pine Oil, stm., dist. bbls	gal.	...	.66
Destructive dist.	lb.	.63	.64
Prime	bbl.	8.00	10.60
Plaster Paris, tech., 250 lb bbls	bbl.	...	3.30
Pumice Stone, lump, 250 lb bbls	lb.	.04¼	.06
Lump, bags	lb.	.04	.05
Powdered, 350 lb bbls	lb.	.02½	.03
QUEBRACHO, 35% liquid tks	lb.	.03	.03½
450 lb bbls c-l		.03½	.04
35% bleaching, 450 lb bbls	lb.	.04	.05
Solid 63% 100 lb. bales clf.	lb.	.04¾	.04¾
Clarified, 64% bales	lb.	...	.05
Quercitron, 51° 450 lb bbls	lb.	.06½	.07
Solid, 100 lb. boxes	lb.	.10	.13
Quercitron, bark, rough	ton.	...	14.00
Ground	ton.	34.00	35.00

Rosins. (Solid in 600 lb bbls gross for net)

B,	13.50	I,	14.55
D,	13.75	K,	14.60
E,	14.00	M,	14.65
F,	14.25	N,	15.35
G,	14.40	WG,	15.85
H,	14.50	WW,	16.05

(Sold in 600 lb bbls net, quotations based on a unit of 280 lb)

Rosin Oil, first run 50 gal bbls	gal.	...	.68
Second run bbls	gal.	...	.70
Rotten Stone lump imp. bbls	lb.	.07	.08
Lump selected, bbls	lb.	.09	.12
Powdered, bbls	lb.	.03	.05
Domestic bags mines		24.00	30.00
Sago Flour 150 lb bags	lb.	.04¼	.05
Spruce, 25% liquid tanks, wks	lb.	.01	.01½
bbls	lb.	...	.01¾
Powd. 50% 100 lb bags wks	lb.	.02	.02¼
Starch, rice, 140 lb bags	lb.	.09	.10
Powd. 140 lb. bgs. c-l	100 lb.	...	3.32
Bags lc-l	100 lb.	...	3.42
Pearl, 140 lb bags	100 lb.	...	3.22
Bags lc-l	100 lb.	...	3.22
Potato domestic, 200 lb bgs c-l	lb.	.04¾	.05
Imported bags duty paid	lb.	.04¾	.05¼
Wheat, dom., thick bags	lb.	.06½	.07
Thin, bgs	lb.	.09½	.10
Sol. Potato	lb.	.06	.06½
Sumac, extract, liq 450 lb bbls	lb.	.05	.06
CP., 450 lb bbls	lb.	...	.10½
Stainless, 600 lb bbls	lb.	.11	.11½
Sumac, Sicily leaves 100 lb bags	ton	130.00	nom.
Ground shipment	ton	82.00	93.00
Virginia, 150 lb bags	ton.	55.00	60.00
TALC, Italian 220 lb bags NY	ton.	40.00	50.00
Refined, white bags	ton.	50.00	55.00
French, 220 lb bgs NY	ton.	30.00	35.00
Refined, white bags	ton.	38.00	45.00
Dom., crude, 100 lb. bags NY	ton.	12.00	15.00
Refined 100 lb bags NY	ton.	16.00	18.00
Tankage, ground NY	unit	4.00	& .10
High grade fob Chicago	unit	4.25	& .10
So. Am., cif	unit	4.25	& .10
Tapioca Flour, high grade bgs.	lb.	.03¾	.04
Medium grade, bags	lb.	.03	.03½
Low grade, bags	lb.	2.75	3.00
Tar, Kiln-burnt	bbl.	...	14.50
Retort bbl	bbl.	...	15.50
Tripoli, 500 lb. bbls	100 lb.	2.50	3.00
Turpentine Spirits, bbls	gal.	.88	.92½
Wood steam Dist. bbls	gal.	.78	.82½
Valonia Cups 30-31% tan	ton	...	32.00
Beard, 42% tan bags	ton	51.00	52.00
Mixture, 36% tan bags	ton	...	38.00
Wattle Bark, bags	ton	40.50	41.00
Extract 55% dble bgs ex-dock	lb.	...	.05¾
Whiting 200 lb bags c-l wks	100 lb.	...	1.25
Alba bags NY c-l	ton.	...	13.00
Gilders, bags NY c-l	100 lb.	...	1.35
French, bags NY c-l	ton.	14.50	19.00
English, bags NY c-l	ton.	21.00	22.00
Paris white bags c-l	100 lb.	1.00	1.00

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ALBUMEN—53 cs., Standard Bank of South Africa, Shanghai; 56 cs., Standard Bank of South Africa, Hankow; 122 cs., A Klipstein & Co., Hankow; 29 cs., Siemssen & Co., Hankow; 56 cs., Mechanics & Metals National Bank, Tientsin; 56 cs., French Kreme Co., Shanghai; 140 cs., A Klipstein & Co., Taku Bar

ALCOHOL—Methyl, 145 drs., Kuttroff Pickhardt & Co., Rotterdam

AMMONIUM—Carbonate, 30 cks., Standard Bank of South Africa, Liverpool; **Chloride,** 52 cks., Innis Speiden & Co., Rotterdam; **Nitrate,** 175 cks., Kuttroff Pickhardt & Co., Hamburg

ANTIMONY—500 cs., International Banking Corp., Shanghai; 500 cs., Order, Shanghai; 250 cs., International Banking Corp., Hankow; **Regulus,** 500 cs., Stanley Fullweed, Changsha; 250 cs., Standard Bank of South Africa, Shanghai; 250 cs., Order, Shanghai; 250 cs., D. I. Moss & Co., Shanghai; 250 cs., Mitsui Bussan Kaisha Ltd., Hankow; 1,000 cs., Arnhold & Co., Shanghai

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CHALK—1,200 bgs., Chatham & Phoenix National Bank, Antwerp; 1,687 bgs., National City Bank, Antwerp; **Tartar,** 107 bgs., Harshaw, Fuller & Goodwin, Barcelona

CHEMICALS—213 drs., A Klipstein & Co., Hamburg; 150 bgs., 12 cks., Irving Bank, Columbia Trust Co., Hamburg; 6 cs., 7 kgs., Order, Hamburg; 100 cks., Chase National Bank, Bremerhaven; 5 bbls., Hummel & Robinson Corp., Bremen; 10 carboys, 23 cks., H Sundheimer Inc., London; 26 cs., H A Metz & Co., Hamburg; 13 bbls., E Falck & Co., Hamburg; 20 bgs., F Behrend Inc., Hamburg; 17 cks., Fezandie & Sperrle, Hamburg; 80 cks., 124 cs., Order, Hamburg; 95 cks., 5 drs., International Acceptance Bank, Rotterdam; 116 bbls., Roessler & Hasslacher Chem Co., Rotterdam; 100 bbls., H Hinrichs Chemical Corp., Rotterdam; 25 bbls., American Bluefriesveem Inc., Rotterdam; 107 cks., International Acceptance Bank, Rotterdam; 600 bgs., 75 bbls., **Order,** Rotterdam; 180 cks., 80 balloons Roessler & Hasslacher Chem Co., Rotterdam; 133 cks., K Geiger Inc., Rotterdam

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COLORS—15 bbls., Order, Genoa; 10 cks., National City Bank, London; 5 cks., J M Huber, Hamburg; 18 cks., Geigy Co., Hamburg; 43 cks., 3 cs., 4 jugs, General Dyestuff Corp., Rotterdam; 4 cks., Irving Bk., Antwerp; 1 bbl., Bank of Manhattan Co., Antwerp; 2 bbls., 2 cks., Chemical National Bank, Antwerp; 2 bbls., Irving Bank Columbia Trust Co., Antwerp; 7 bbls., National City Bank, Antwerp; 2 kgs., Irving Bank Columbia Trust Co., Liverpool; 1 bbl., American Exchange Pacific National Bank, Liverpool; 25 cks., Grace Nat Bank, Copenhagen; **Bronze,** 6 cs., Order, Hamburg; 70 cs., Baer Bros., Hamburg; 14 cks., J E Mandlik, Hamburg; 9 cs., American Express Company, Bremerhaven; 7 cs., Hensel Bruckmann & Lorbacher, Bremen; 14 cs., B F Drakenfeld & Co., Bremen; **Coal Tar,** 23 cks., General Dyestuff Corp., Hamburg; 6 cks., General Dyestuff Corp., Rotterdam; **Earth,** 50 cks., Heller & Merz Co., Bremen

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FULLERS EARTH—300 bgs., L A Salomon & Bros., London

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GLAUBER SALTS—125 cks., Order, Hamburg

GLUE—700 bgs., Pfaltz & Bauer, Antwerp; 100 bgs., S Isaacs & Co., Antwerp; 30 bls., Jefferson Import Co., Hamburg; 30 bls., Order, Marseilles; 61 bgs., Pfaltz & Bauer, London; 68 bxs., L W Ferdinand & Co., London; 50 bgs., H Bierschenk & Co., Liverpool; 50 bgs., N L Lederer, Rotterdam

GLUESTOCK—555 bls., Order, Genoa; 100 bgs., C B Hewitt Bros., Rotterdam; 27 bgs., Harriton Glue Co., Rotterdam; 19 bgs., Madison Glue Co., Rotterdam

GLYCERIN—20 drs., Armour Soap Works, Rotterdam; 120 drs., Colgate & Co., Rotterdam; 32 drs., International Banking Corp, Shanghai; 10 drs., Brown Bros & Co., Antwerp; 60 drs., Order Antwerp; 40 drs., Parsons & Petit, Buenos Aires; 40 drs., Ashmore Hilton & Co., Liverpool; 50 drs., Armour Soap Works, Rotterdam

GUMS—2,546 bgs., Order, Port Sudan; 20 cs., Order, Marseilles; **Animi,** 5 cs., S Winterbourne & Company, London; **Arabic,** 100 bgs., Order, Port Sudan; **Copal,** 64 bgs., Baring Bros & Co., Singapore; 122 bgs., Guaranty Trust Co., Singapore; 192 bgs., United National Bank, Singapore; 192 bgs., 8 cs., Grace National Bank, Manila; 278 bkts., Kidder Peabody Acceptance Corp., Macassar; 241 bkts., Brown Bros & Co., Macassar; 1,410 bkts., 573 bgs., Order, Macassar; 1,179 bkts., Order, Macassar; 40 bls., Brown Bros & Co., Antwerp; 260 bgs., A Klipstein & Co., Antwerp; 102 bgs., Chemical National Bank, Antwerp; 64 bkts., Order, Macassar; **Damar,** 100 cs., Bank of Manhattan Co., Batavia; 100 cs., Guaranty Trust Co., Batavia; 100 cs., Grace National Bank, Batavia; 400 cs., National City Bank, Batavia; 150 cs., Order, Batavia; 153 cs., 64 bags, Baring Bros & Co., Singapore; 123 bgs., Brown Bros & Co., Singapore; 200 cs., National City Bank, Batavia; 100 cs., Standard Bank of South Africa, Batavia; 100 cs., National Park Bank Batavia; 100 cs., Order, Tandjong Priok; 320 bgs., L C Gillespie & Son, Singapore; 200 cs., Order, Batavia; **Elemi,** 209 cs., Corn Exchange Bank, Manila; **Hashab,** 630 bgs., Thurston & Braidich, Port Sudan; 200 bgs., Brown Bros & Co., Port Sudan; 563 bgs., Order, Port Sudan; 1,315 bgs., Thurston & Braidich, Port Sudan; 263 bgs., T M Duche & Sons, Port Sudan; 513 bgs., Order, Port Sudan; **Kauri,** 26 cs., J D Lewis, Auckland; 241 cs., Patterson Boardmarn & Knapp, Acukland; 132 cs., 294 sks., A Klipstein & Co., Auckland; 44 cs., Chemical National Bank, Auckland; 60 cs., United National Bank, Auckland; 60 cs., S Winterbourne, Auckland; 65 cs., Davies Turner & Co., Auckland; 86 cs., L C Gillespie & Sons, Auckland

HYDRATE OF OXIDE OF CHROMIUM—10 cks., General Dyestuff Corporation, Hamburg

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MYROBALANS—6,000 pkts., Order, Calcutta; 2,770 pkts., Standard Bank of South Africa, Calcutta; 6,000 pkts., Order, Calcutta

OCHRE—295 cks., F B Vandegrift & Co., Marseilles; 19 cks., J L Smith & Co., Marseilles; 80 cks., Grace National Bank, Marseilles; 42 cks., Reichard Coulston, Marseilles

OILS—Coconut, 202 cylinders, Order, Colombo; 1,959,497 lbs., Philippine Refining Co., Manila; 1,086 tons, Spencer Kellogg & Sons, Manila; **Cod,** 109 brls., Order, Liverpool; 34 cks., R Badcock & Co., St Johns; **Corn,** 75 brls., Order, Southampton; Degras, 25 brls., R Badcock & Co., Liverpool; **Olive** 100 cs., B Bendin Inc., Genoa; 100 cs., Messina Imptg Co., Genoa; 165 cs., Ettore Penna, Genoa; 100 cs., Banco di Sicilia Trust Co., Genoa; 150 cs., American Exchange Pacific Nat Bank, Genoa; 100 cs., Webster Sausage Mfg Co., Genoa; 106 cs., F Mastropsi Co., Palermo; 110 cs., Mirotta & Cella, Genoa; 125 cs., A F Roloson, Genoa; 110 cs., P Parlato Genoa; 1,879 cs., Order, Genoa; 115 cs., Manuel Caragol & Sons, Barcelona; 256 tanks, Order, Seville; 200 cs., La Montagne, Southampton; 100 cs., Austin Nichols Co., Marseilles; **Palm,** 299 brls., Nat City Bank, Belawan Deli; 616 tons, Superintendence Co., Belawan Deli; 165 cks., W & A Leaman, Warri; 160 cks., Irving Bank Columbia Trust Co., Port Harcourt; 100 cks., Order, Port Harcourt; 26 butts., American & Eastern Trdg Co., Hamburg; **Peanut,** 5 brls., Lamont Corliss & Co., Rotterdam; **Rape,** 50 drs., W R Grace & Co., Liverpool; 725 drs., Mitsui Bussan Kaisha, Liverpool; 200 drs., Mitsui Bussan Kaisha, Osaka **Sesame,** 251 drs., J C Francesconi, Rotterdam; 150 drs., Order, Copenhagen; **Soya Bean** 250 drs., Aspegren & Co., Inc., Rotterdam; 10 drs., W Van Doorn, Rotterdam; **Sulphur,** 600 brls., Heidelbuch Ickelheimer & Co., Lisbon; 500 brls., Order, Malaga; **Vegetable,** 173 brls., Order, Antwerp; **Wood,** 655 tons, L C Gillespie Sons, Hankow; 150 cks., W R Grace & Co., Hankow; 350 brls., Mitsui & Co., Shanghai

PLUMBAGO—176 bbls., N Y Trust Co., Colombo; 87 bbls., Order, Colombo; 58 bbls., N Y Trust Co., Colombo; 196 bgs., Order, Colombo; 200 bgs., 31 bbls., Brown Bros & Co., Colombo

POTASSIUM SALTS—100 cks., Innis Speiden & Co., Rotterdam; **Bicarbonate,** 50 cks., Roessler & Hasslacher Chemical Co., Rotterdam; **Caustic,** 80 drs., Superfos Co., Hamburg; 25 cs., Merck & Co., Hamburg; 80 drs., Superfos Co., Hamburg; 5 cs., Mallinckrodt Chemical Works, Hamburg; **Chlorate,** 16 cks., Seaboard National Bank, Hamburg; **Muriate,** 914,100 kilos, 500 bgs., Societe Comm des Potasses d'Alsace, Antwerp; 3,200 bgs., Potash Importing Corp of America, Hamburg; 3,130 bgs., Societe Comm des Potasses d'Alsace, Antwerp; **Nitrate,** 1,016 bgs., Kuttroff Pickhardt & Co., Hamburg; **Prussiate,** 18 1 gs., C Tennant Sons & Co., Liverpool; **Sulfate,** 2,250 bgs., Societe

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This costs you nothing: obligates you to nothing. Thousands of manufacturers use this buying guide daily in purchasing their chemical and drug raw materials.

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Forms close August First

DRUG & CHEMICAL GUIDE BOOK

25 SPRUCE ST. NEW YORK

CINCINNATI (Continued)

Cincinnati Rendering Co, Queen City nr Garrard	West 4270
Cincinnati Soap Co, Spring Grove & Clifton Wn pl	Park 2080
Clapp Ammonia Co, B P, Keck & St Andrew	East 258
CLEVELAND-CLIFFS IRON CO	
Clifton Springs Dist Co, 3849 Ludlow av	Park 174
Columbia Naval Stores Co, 63 Pickering bldg	Main 2228
Compressed Wood Preserving Co, 4665 Spring Grove av	Park 338
Continental Glue Co, 206 E Front st	Main 2593
Conway Tallow Co, 526 Poplar st	West 911
Corkins Chemical Co, 1114 Elm st	Canal 769
Cramer Co, Jos, 67 Electric bldg	Main 1097
Darco Sales Corp, 4609 Eastern av	East 127
Devoe & Raynolds Co, Cinn Term bldg	Canal 5927
Dextro Prods, 206 E Front st	Main 2593
DOW CHEM CO, 1515 W 6th st	**West 6813**
Full List Products This Firm, See Part III.	
Drackett Chem Co, 5020 Spring Grove av	Park 1070
Durbin Co, C M, 63 Pickering bldg	Main 2228
Dyes Distributing Corp, 232 E Pearl	Main 1709
Eagle-Picher Lead Co, 1030 Broadway	Canal 1875
Eakins, J S, & W R, 12 E 3rd	Main 1471
Eddy Chemical Co, 232 E 3rd	Main 4063
Ellin, Jacob, John & Poplar sts	West 77
Elmwood Rendering Co, Big 4 Ry nr Smalley, Lockland	Valley 887
Emery Candle Co, St Bernard	Park 1540
Evans Chemical Co, 241 Walnut st	Main 2507
Fairbanks Co, N K, 443 E 6th st	Canal 3055
Federal Color Labs, Forest st, Norwood	Ridge 3588
Federal Phosphorus Co, 1515 W 6th st	West 6813
Federal Prod Co, 229 Race st	Main 2547
Fischer Soap & Oil Co, Paddock rd, Bond	Norwood 1648
Fleischmann Co, Perry & Plum sts	Main 3149
Fletcher Chem Co, 128 W Court	Canal 3137
Ford Co, J B, 905 Union Central bldg	Main 5239
Freund Chas A, 1215 W Liberty st	West 1250
Fries & Bro, Alex, 312 E 2nd st	Main 1163
FRIES & FRIES CO, 1501 W 6th st	**Warsaw 807**
Full List Products This Firm, See Part III.	
Fromeyer & Co, 606 Reading rd	Canal 2466
Geigy Co, 232 E Pearl st	
General Labs Co	

Sample Page of Part I (Directory)

PUMICE STONE (Continued)

Parsons & Petit, 63 Beaver st N Y	Bowl Grn 4048
Rieha, Marshall, 1417 Thames st Baltimore	Wolfe 8254
Robins & Co, G S, 515 S 2 st St Louis	Olive 6368
Thompson-Hayward Chem Co, 30 & S W blvd Kansas City Mo	Grand 2473
Ulrich Chem Co, 606 Occidental bldg Indianapolis Ind	Main 6879
Wiarda & Co, John C. 262 Freeman st Bklyn N Y	Greenpnt 3090

Alpha Lux Co, N Y	Los Angeles Chem Co, Los Angeles
Baker & Collinson, Detroit	Mediterranean & Genl Traders, N Y
Barada & Page, Kansas City	National Pumice Stone Co, N Y
Behrend, F, N Y	Natl Sales Corp, Cincinnati
Churchill Drug Co, Burlington Ia	Nicholas & Co, J H, N Y
Gleick, Joseph T, St Louis	Rhodes, Jas H, Bklyn N Y
Globe Chem Co, Cincinnati	Tamms Silica Co, Chgo
Hammill & Gillespie, N Y	Waddell & Co, R J, N Y
King & Malcolm Co, N Y	Wagner Co, Chas A, Phila
Libby Corp, Scott L, N Y	

PUMPKIN SEED

Penick & Co, S B, 115 Fulton st N Y	Beekman 9745
Powell & Co, John, 12 Water st N Y	Bowl Grn 3550
Cammerer & Co, G A, Chgo	Nickells Rowland Co, N Y
McLaughlin Gormley King Co, Minneapolis	Peek & Velsor, N Y

PYRETHRUM FLOWERS, see Insect Flowers

PYRIDINE

Grades—Technical; medicinal. Containers—Technical, 110, 55 gal. drums, 50 gal. bbls., Medicinal, 25, 5 lb. cans, 5, 1 lb. bottles.

Baird & McGuire, Holbrook Mass	Randlph 0170
du Pont de Nemours & Co, E I, Wilmington Del	Wilmngton 1720
Full List Products This Firm, See Part III.	
Greeff & Co, R W, 78 Front st N Y	Bowl Grn 5825
Full List Products This Firm, See Part III.	
Hardy, Chas, 100 E 42 st N Y	Ashland 5740
Hurst & Co, Adolphe, 30 Church st N Y	Cortland 1896
Industrial Chem Co, 200 5 av N Y	Grmcy 3243
Jordan & Bro, Wm E, 13 Cliff st N Y	Beekman 1758
Lawson Corp, Wm C, (Broker) 51 Chambers st N Y	
Mallinckrodt Chem Wks, 3600 M	
Merck & Co, 45 Park	
Newport Ch	
Pa	

Sample Page of Part II (Buying Guide)

Comm des Potasses d'Alsace, Antwerp; 80 bbls., Potash Importing Corp of America, Bremernaven; 250 bgs., Potash Importing Corp of America, Hamburg
PYRIDINE—5 drs., Order, Rotterdam
SEEDS—Castor, 14,946 bgs., Order, Coconada; **Rape,** 451 bgs., Crawford Hammond & Co., Buenos Aires; 50 bgs., F H Von Damm, Rotterdam; 70 bgs., Order, Rotterdam
SHELLAC—50 bgs., British Overseas Bank, Calcutta; 300 bgs., Anglo South American Bank, Calcutta; 100 bgs., American Exchange National Bank, Calcutta; 100 bgs., Chase National Bank, Calcutta; 25 cs., 2,550 bgs., Order, Calcutta; 250 bgs., 50 chests, British Bank of South America, Calcutta; 150 bgs., Lee Higginson & Co., Calcutta; 50 bgs., British Overseas Bank, Calcutta; 175 chests, 15 cs., Order, Calcutta; 200 bgs., National City Bank, Calcutta; 250 bgs., Standard Bank of South Africa, Calcutta; 50 cs., 250 bgs., First National Bank of Boston, Calcutta; 312 chests, 1,255 bgs., Order, Calcutta; **Button Lac,** 45 bgs., 75 bls., Order, Calcutta; 37 bgs., 25 chests, Order, Calcutta; **Garnet Lac,** 300 bgs., Lee Higginson & Co., Calcutta; **Seed Lac,** 470 bgs., Order, Calcutta; 309 bgs., First National Bank of Boston, Calcutta; 100 bgs., Order, Calcutta
SOAP—250 cs., Order Marseilles
SODIUM SALTS—Chlorate, 1,000 cks., Seaboard National Bank, Hamburg; **Ferrocyanide,** 14 cs., E Dietzgen & Co., Inc., Rotterdam; **Nitrate,** 15,654 bgs., W R Grace & Co., Iquique; **Nitrite,** 25 cks., R W Greeff & Co., Oslo; **Silico Fluoride,** 218 bbls., H Sundheimer, Copenhagen; 122 bbls., Order, Copenhagen; **Sulfate,** 100 cks., Order, Rotterdam
SUMAC—450 bgs., Order, Palermo
TALC—75 cs., Markwell Mfg Co., Bordeaux; 1,200 bgs., C B Chrystal Co., Bordeaux; 2,500 bgs., L A Salomon & Bro., Bordeaux; 650 bgs., Whittaker Clark & Daniels, Bordeaux; 500 bgs., L A Salomon & Bro., Genoa; 250 bgs., National City Bank, Genoa
TAPIOCA—191 bgs., National City Bank, Sourabaya; **Flour,** 1,991 bgs., Goldman Sachs & Co., Batavia; 575 bgs., Sino Java Hvg., Batavia; 575 bgs., Order, Batavia; 578 bgs., Order, Tandjong Priok, 5,509 bgs., National City Bank, Sourabaya; 951 bgs., Balfour Williamson & Co., Batavia; **Pearl,** 851 bgs., National City Bank, Sourabaya
TAR—Wood, 44 bbls., Hallgarten & Co., Danzig; 584 bbls., Order, Danzig; 32 bbls., Chatham & Phoenix National Bank & Trust Co., Stockholm
UREA—25 cks., Kuttroff Pickhardt & Co., Rotterdam
VENETIAN RED—100 cks., J I. Smith & Co., Liverpool
WAX—10 bgs., Order, London; **Bees,** 54 bgs., D Steengrafe, Manzanillo; 80 bgs., Brown Bros & Co., Calcutta; 35 bgs., Duncan Fox & Co., Valparaiso; 85 bgs., Brown Bros & Co., Calcutta; 46 pks., C W J Allison, Lisbon; 11 sks., R Desvernine, Puerto Cortez; 61 bls., Arkell & Douglas Inc., London; **Carnauba,** 143 bgs., Lazard Freres, Brazil; 113 bgs., Order, Brazil; **Paraffin,** 13,200 bags, Asiatic Petroleum Co., Balikpapan; 1,200 bgs., Asiatic Petroleum Co., Balikpapan; **Spermaceti,** 100 cs., Order Southampton; **Vegetable,** 100 cs., Mitsui & Co., Kobe
WHITING—1,365 bgs. Coupey Fils, Havre; 500 bgs., Hammond & Gillespie, Havre; 500 bgs., C B Chrystal Co., Havre; 1,300 bgs., L Scott Libby Corp., Havre
WOODFLOUR—400 bgs., A Kraemer & Co., Rotterdam; 400 bls., Order, Rotterdam
WOOLGREASE—100 bbls., A Klipstein & Co., Antwerp

IMPORTS AT PHILADELPHIA

June 30 to July 6

AMMONIA—Muriate, 40 casks, Order, Rotterdam
BONE MEAL—300 bags, Order, Rotterdam
CHALK—500 tons, Order, London
CLAY—China, 6,452 tons, Order, Fowey; **Saggery,** 74 tons, 16 cwt., Order, Fowey; 734 tons, Moore & Munger, Bristol; 200 tons, J W Hampton Co., Bristol; 160 tons, 5 cwt., Order, Bristol
FERRO ALLOY—134 bags, 83 drums, 15 bbls., Truempy Faesy & Besthoff, Genoa
FULLERS EARTH—200 bags, L A Salomon & Bro., London
FERTILIZER—16 bags, Order, London
GUM—Copal, 66 bags, Frank 4th St National Bank, Macassar; 273 baskets, Frank. 4th St National Bank, Macassar; 62 baskets, Order, Macassar; 200 bags, Brown Bros Co., Antwerp
LIME—Sulphate, 60 casks, Order, Bordeaux
MANURE—Chemical, 38 bags, H A Dreer Inc, London; 27 bags, Hosea Waterer, London; 20 bags W E Cock Inc., London
NAPHTHALENE—625 bags, Order, Rotterdam
OCHRE—65 casks, Grace Nat Bank, Marseilles
OIL—Olive, 100 cases, G Feti, Genoa; 2,150 cases, Order, Genoa 11 bbls., Antoine Olaiti, Messina; 20 cases, Colombo Co., Palermo; 225 cases Order Nice; 50 bbls., Bowery & East River Nat Bank, 150 bbls., Order, Palermo; 6 cases, G F Lombardo; Messina; 4 cases, Morris Friedman, Messina, 75 cases Order, Genoa
OIL PAINT—13 cases, Order, Rotterdam
ORE—Iron, 508 tons, C K Williams Co., Malaga; 6,269,000 kilos, Order, Benisaf; **Manganese,** 533,400 kilos, Order, Tjilatjap; **Pyrites,** 7,097 tons, Pyrites Co., Huelva
OXIDE—Iron, 120 bbls., J H Nicholas Co., Malaga
POTASH—Muriate, 250 bags, Soc Comm des Pot d'Alsace, Antwerp
SALT—304,800 ktles, Chas Kurz Co., Rotterdam
SODIUM—Cyanide, 112 bbls., Anglo So Am Tr Co., Havre; **Hyposulfite,** 25 drums, Order, Rotterdam; **Phosphate,** 17 casks, Brown Bros Co, Antwerp; 100 bbls., Order, Antwerp; **Sulphide,** 32 drums, Order, Rotterdam
STARCH—Potato, 100 bags, Order, Rotterdam
SUMAC—350 bags, Order, Palermo
TAPIOCA FLOUR—319 bags, Nat City Bank, Batavia; 306 bags, Bk of N Y & Trust Co., Batavia; 255 bags, Internat Bank Corp., Batavia; 500 bags, Equitable Trust Co., Batavia; 482 bags, Order, Batavia; 500 bgs. Phila-Girard Nat Bank, Batavia

July 7 to 14

BAUXITE—6,850 tons, Guaranty Trust Co., Siberia; 2,450 tons, General Chemical Co., Georgetown
BONE MEAL—552 bags, Philipp Bauer Co., Bremen
BONES—604 bags, Baugh & Sons Co., Ponce. 315 bags, Order, Hamburg
CHEMICALS—100 kegs, Order, Hamburg, 52 casks, Order, Hamburg; 2 drums, Order, Hamburg; 250 bags, Order, Rotterdam; 2 cases, E H Bailey Co., Havre
CHEMICAL COMPOUNDS—25 cases, Order, Trieste
DAMAR—149 bags, Stand Bk of So Africa, Singapore
DYE SPIRIT—Liquid, 15 cases, Amer Dyewood Co., Havre
FLUOPSPAR—214 tons, 5 cwt., W R Grace Co., Manchester
GLAUBER SALTS— 275 bags, Chas Kurz Co., Hamburg
KAINIT—200 bags, Potash Imp Co., Hamburg; 137,000 kilos, Potash Imp Co., Hamburg; 1,250 bags, Potash Imp Co., Hamburg; 390,700 kilos, Potash Imp Co., Hamburg
LITHOPONE—40 cases, A Klipstein Co., Bremen
MANGROVE BARK—400 bags, Order, Singapore
MYROBALANS—2,252 pckts., Stand Bk of So Africa, Calcutta; 7,306 pckts., Stand Bk of So Africa, Bombay; 6,906 bags, Order, Colombo; 400 bags, Order, Colombo, 2,720 pckts., Order, Calcutta
MAGNESITE—42,751 bags, Harbison-Walker Refractories Co., Trieste; 217 bbls., Brown Bros Co., Rotterdam; 300 pkgs., Brown Bros Co., Rotterdam
OIL—Olive, 250 cases, Binenstock Swinger, Genoa; 250 cases, Kurtz Bros., Genoa; 100 cases, Order, Genoa; 100 bbls., Order, Malaga; **Palm,** 156 casks, **African** & East Trad Co., Hamburg
ORE—Chrome 5,840 tons, Porto Rican Ore Co., Pastelillo; 1,400 tons, Order, Volo; 4,555 tons F J Lavino Co, Beira; **Manganese,** 740 sacks, E J Lavino Co., Ponce; **Pyrites,** 8,003,660 kilcs, Pyrites Co., Huelva
PAPRIKA—300 bags, Order, Alicante
POTASH—Caustic, 50 drums, Order, Hamburg; 1,500 tons, Order, Antwerp
PYRIDINE—6 bbls., Order, Hamburg
SALT—250 bags, Order, Hamburg
SHELLAC—225 bags Brown Bros Co., Calcutta; 4,433 bags, Order, Calcutta; 25 bags, Order, Calcutta
SODIUM—Caustic, 125 drums, Order, Hamburg; **Fluoride,** 50 bbls., Order, Hamburg; **Nitrate,** 106,609 bags, Wessel Duval Co., Tocopilla,; **Silica Fluoride,** 508 bdls., Order, Copenhagen
STARCH—Potato, 500 bags, Stein Hall Co., Rotterdam
STEARINE—2 bags, E F Houghton Co., Manchester
WHITING—1,120 bags, Order, Havre

IMPORTS AT BALTIMORE

June 30 to July 8

BAUXITE—Residue, 1,110,142 lbs., John S Connors, Oregon Maru, Hamburg
EPSOM SALTS—500 bags, 110,000 lbs., Brown Bros & Co., Oregon Maru, Hamburg
MAGNESITE—Burned, 3,600 bags, 721,637 lbs., C Tennant Sons & Co., New York, Oregon Maru, Hamburg
MOLDING PLASTER—1,000 bags, 102,300 lbs., Order, Lorain, Bremen
ORE—Chrome, 1,200 tons, E J Lavino & Co., Ocean Prince, Beira; **Iron,** 11,000 tons, Bethlehem Steel Corp., Sartore, Daiquiri; 20,000 tons Bethlehem Steel Corp., Svealand, Cruz Grande; 20,000 tons, Bethlehem Steel Corp., Amaerikaland, Cruz Grande; **Manganese,** 5,010 tons, Carnegie Steel Co., Barracoo, Seccondee; 7,892 tons, Bethlehem Steel Corp., Willowpool, Poti
POTASH—93 casks, 71,540 lbs., F H Shallus Co., Oregon Maru, Hamburg; 96 casks, 103,554 lbs., American Exchange National Pacific Bank, Oregon Maru, Hamburg; 58 bbls., 59,024 lbs., Roessler & Hasslacher Chemical Co, Lorain, Hamburg; 79 casks, 60,929 lbs., F H Shallus Co., Lorain, Hamburg; **Caustic,** 90 drums, 50,433 lbs., F H Shallus Co., Lorain, Hamburg; **Carbonate,** 58 bbls., 59,228 lbs., F H Shallus Co., Oregon Maru, Hamburg; 199 bbls., 175,949 lbs., Brown Bros., Oregon Maru, Hamburg; 121 bbls., 90,264 lbs., Parsons & Petit, Oregon Maru, Hamburg; **Kainit,** 504,231 lbs., Potash Importirg Corp, Oregon Maru, Hamburg, 302,396 lbs., F H Shallus Co., Oregon Maru, Hamburg; **Manure Salt,** 199,573 lbs. Potash Importing Corp., Oregon Maru, Hamburg; 2,296,105 lbs., F H Shallus Co., Oregon Maru, Hamburg; **Muriate,** 3,000 bgs., 663,381 lbs., Potash Importing Corp., Oregon Maru, Hamburg; 4,850 bgs., 1,071,400 lbs. F H Shallus Co., Oregon Maru, Hamburg; 3,492 bags, 769,008 lbs., Potash Importing Corp, Oregon Maru, Hamburg; **Sulphate,** 1,000 bags, 221,043 lbs., Potash Importing Corp., Oregon Maru, Hamburg

July 8 to 15 inclusive

ACID—Stearic, 10 bags, Order Breedijk, Rotterdam
CHALK—366 bags, Wysham Co., Breedijk, Rotterdam
CHEMICALS—131 casks, F H Shallus Co. Breedijk, Rotterdam; 2,000 bags, Paul Uhlig & Co., Inc., New York Breedijk, Rotterdam; 250 bags, F H Shallus Co., Breedijk, Rotterdam
CLAY—Burnt, 420 bags 30 tons, H A Robinson & Co., New York, Winona County Liverpool
CORK—66 bales Crown Cork & Seal Co., Breedijk Rotterdam
FERRO—Phosphorus, 94 bbls., 106,630 lbs., H Hollesen, Inc., New York Winona County, Liverpool
GELATIN—12 casks, 4,287 lbs., F H Shallus Co, Corson, Marseilles
MOLASSES—1 300,000 gals., Cuba Distilling Co., Catahoula, Cienfuegos
POTASH—Caustic, 350 drums, William H. Masson, Breedijk, Rotterdam
OIL—Olive, 472 bbls. 224,588 lbs., Pompeian-Romanza Co., Corson, Naples; **Palm,** 50 bbls., Fisher Hollinshed, Inc., Breedijk Rotterdam; **Soya Bean,** 25 bbls., Fischer Hollinshed, Inc., Breedijk Rotterdam

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Detroit
Little Rock
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Charleston

ORE—Iron, 11,000 tons, Bethlehem Steel Corp, Firmore, Daiquiri; 6 461 tons, W F Spice & Co., Millpool, Honain; 19,800 tons, Bethlehem Steel Corp., Bethore, Cruz Grande, **Manganese,** 2,000 tons, Carnegie Steel Co, City of Newcastle, Calcutta
PEBBLES—354 bags, 67,326 lbs., Buebendorf & Bro., MacKeesport, Havre
PYRITES—8,233 tons Davison Chemical Co., Swanby, Huelva; 4,609 tons, F S Royster Guano Co., Fosalia, Huelva

IMPORTS AT BOSTON

June 26 to July 3

ACID—Formic, 80 bals., R & H Chemical Co., Antwerp
BUTTONLAC—41 csks., Rogers Pyatt Shellac Co., Calcutta
CASEIN—349 bags, Order, Havre
DEXTRINE—25 kegs, Borden Remington, Liverpool
EXTRACT—Quebracho, 198 bags, Order, Havre
GARNETLAC—100 bags, Brown Bros., Calcutta; 75 chsts., Brown Bros., Calcutta
GUM—100 bags, Order, Calcutta
OSSEIN—1,016 bags, Kidder Peabody Co., Antwerp
SAL AMMONIAC—77 csks., American Express Co., Liverpool
SHELLAC—25 bags Order, Calcutta 135 bags, Baring Brothers, Calcutta; 10 chsts., Baring Bros., Calcutta; 138 bags, Rogers Pyatt Shellac Co., Calcutta; 60 chsts., Rogers Pyatt Shellac Co., Calcutta
SODIUM PHOSPHATE—25 bbls., I H Sobin Co., Antwerp
SODA—Phosphate, 100 csks., R & H Chemical Co., Antwerp
WOOLGREASE—660 bbls, F W Damon, Liverpool

July 3 to 10

ACID—Cresylic, 115 csks., Chas Hardy, Inc., Rotterdam; **Lactic,** 10 bbls., Order, Rotterdam; **Tartaric,** 25 bags, W Benkert & Co., Rotterdam
ALUMINA—Sulfate, 315 bags, Rhodia Chemical Co., Rotterdam
CASEIN—417 bags, Guaranty Trust Co., Buenos Aires; 83 bags, First National Bank, Buenos Aires
DRUGGIST'S SUNDRIES—7 cs., Order, London
GAMBIER—264 cs., Littlejohn & Co., Shanghai
LITHOPONE—100 csks, American Express Co., Rotterdam; 150 csks., A Klipstein Co., Rotterdam
MOLASSES—2,066 bbls., Boston Molasses Co., Barbados
OIL—Cod, 150 csks., F W Damon, St Johns; 14 bbls., Carter Hide Co., Halifax; 65 bbls. Marden Wild Corp., Halifax; 80 bbls., Order, Halifax **Cod Liver,** 110 bbls., United Drug Co., Rotterdam
WOOLGREASE—100 csks, Marden Wild Corp, Rotterdam
ZINC OXIDE—20 bbls., Philipp Bros, Rotterdam

July 10 to 17

ACID—Oxalic, 12 csks, Order, Hamburg
BARIUM—Sulphacyanide, 5 csks, Order, Hamburg
CASEIN—1,751 bags, First Natioal Bank, Buenos Aires; 584 bags, Lee Higginson & Co., Buenos Aires
CHALK—1,400 bags, Order Antwerp
COLOR—Aniline, 2 kgs., Dyestuffs Corp of America, Liverpool; 1 cse., Dyestuffs Corp of America, Liverpool
DEXTRINE—25 kegs Borden Remington Co., Liverpool
EXTRACT—Quebracho, 7,029 bags, National Shawmut Bank, Buenos Aires
EPSOM SALTS—50 kegs, Order, Hamburg
GLUE—200 bags, Nashua Gummed & Coated Paper Company Liverpool
GLAUBERSALTS—250 bags, National Shawmut Bank, Hamburg
IRON—Oxide, 9 csks., Reichard Coulston Co., Liverpool
OIL—Cod, 23 csks., Wm Litchfield Halifax; 30 csks., Marden Wild Corp., Halifax; 100 csks., Salem Oil & Grease Co., Stavanger; **Palm,** 506 csks. African & Eastern Trading Co, Hamburg
POTASH—Caustic, 38 csks., Order, Hamburg; **Muriate,** 1,500 bags Potash Importing Corp of Am., Hamburg
SALAMONIAC—76 csks., American Express Co., Liverpool; 14 csks., A Klipstein Inc. Hamburg; 27 bbls., I M Sobin, Hamburg
SILICON CARBIDE—148 bbls, Order, Stavanger
SODA—Phosphate, 67 bbls. I M Sobin, Antwerp
SUMAC—Ground, 350 bags, Irving Bank & Columbia Trust Co., Palermo
WOOLGREASE—60 bbls., National Shawmut Bank, Liverpool

IMPORTS AT SAN FRANCISCO

June 26 to July 3

AMMONIA—20 casks, Order, Rotterdam
ANTIMONY—Regulus, 250 cases, Federated Metals Corp., Shanghai
BEANCAKE—2,000 bags, Order, Yokohama
CHALK—750 bags, Order, Antwerp
CHEMICALS—45 casks, Braun, Knecht, Heimann Co., Hamburg; 91 drums, Anglo & London Paris National Bank; 49 cases, Order, Antwerp
COPRA MEAL—1,000 bags, Pacific Trading Co, Yokohama
GAMBIER—425 cases, Order, Singapore
GLUE—24 bbls., Order, Rotterdam
KAPOC—100 bales, International Banking Corp., Manila; 275 bales, Lilienthal, Lee & Co., Colombo
LINSEED CAKE—2,000 bags, Mitsui & Co., Kobe
OILS—Cod Liver, 6 casks, the Raymond Co., Rotterdam; **Palm,** 5 casks, Balfour, Guthrie & Co., Manchester; **Peanut,** 890 cases, Ti Hang Lung, Hongkong; **Perilla,** 3 cases, T H Fallon, Kobe
POTASH ALUM—100 cases, Balfour, Guthrie & Co., Kobe
SHELLAC—75 bags, Standard Bank of South Africa, Hongkong; 25 bags, Order, Hongkong; 25 bags, Haslett Warehouse Co., Calcutta; 100 cases, Standard Bank of South Africa, Hongkong
TAPIOCA—Flake, 58 bags, H M Newhall & Co., Batavia
VEGETABLE TALLOW—511 bags, Pacific Orient Co., Hankow
WHITING—1,000 bags. Balfour, Guthrie & Co., Hamburg

July 3 to 10

ACID—21 casks, American Bank Hamburg
BARYTES—54 casks, Meyer, Wilson & Co., Hamburg
CALCIUM CHLORIDE—77 drums, Order, Hamburg
CHEMICALS—25 casks, Braun Knecht, Heimann Co., Hamburg; 300 bgs., Order, Rotterdam
CHLORIDE—149 drums, Mailliard & Schmiedell, Hamburg; 105 cases, Order Rotterdam
DRIED BLOOD—2,156 bags, Swift & Co., Montevideo 1,658 bags, Order Montevideo
EXTRACT—Quebracho, 5,950 bags, International Products Corp., Buenos Aires; 3,100 bgs. Tannin Corp., Buenos Aires
GLUE—41 tins, J & R Wilson, Antwerp
OILS—Codliver, 25 bbls. Raymond Co., Rotterdam; 25 bbls., Scott Company, Rotterdam
PHOSPHATE—254 bags, Order Antwerp
POTASH—100 bags, Meyer, Wilson & Co., Hamburg
POTATO FLOUR—50 bags, Stein Hall & Co., Hamburg
SEEDS—50 bags. Vincent Seed Co. Hamburg; 15 bags, Volkman & Co., Hamburg; **Rape,** 50 bags, Order, Antwerp
TANKAGE—1,371 bags Pacific Guano & Fertilizer Co., Buenos Aires; 1,929 bags, Sacramento Feeding & Fertilizer Co., Buenos Aires

IMPORTS AT NEW ORLEANS

July 6 to 13

BAUXITE—2,228 tons, Republic Mining Co., Paramaribo
FERRO-MANGANESE—2,000 tons, Order, Scandinavia
MALT—50 tons, Order, Port Cabezas
POTASH NITRATE—66 bbls., Order, Havre
SALT—5,595 sacks, Order, Havana

July 2 to 9

BENZINE—8,182 tons, New Orleans Refining Co., Curacao
BARIUM CARBONATE—207 casks, Order, Rotterdam
BAUXITE—2,567 tons, Republic Mining Co., Georgetown
CREOSOTE—8,652 tons, Bernuth Lembecket Co., Amsterdam
FULLER'S EARTH—939 bags, Order, London
FLUOR SPAR—3,365 tons, Aluminum Ore Co., Durban
MOLASSES—751,400 gallons, Dunbar Molasses Co., Santiago; 1,475,148 gallons, Dunbar Molasses Co., Santiago
NAPHTHALENE—600 sacks, Order, Bremen
OIL—Creosoted, 8,921 tons, New York Trust Co., Middlesborough; **Palm,** 250 casks, Order, Rotterdam
POTASH—Caustic, 82 drums, Order, Bremen
SODA NITRATE—10,688 sacks, W R Grace & Co., Iquique
SPIEGELEISEN—413 tons, Order, London
SALTPETRE—254 bags, Order, Hamburg
BAUXITE—2,269 tons, Republic Mining Co., Georgetown; 2,277 tons Republic Mining Co., Georgetown
BENZINE—7,874 tons, New Orleans Refining Co., Curacao
BARIUM—Hydrate, 113 sacks, Order Hull
COPRA—3,785 tons, Procter & Gamble, Manila; 1,000 tons, Order Manila
FULLERS EARTH—1,600 sacks, Order, London
IRON OXIDE—82 casks, Order, Manchester
MOLASSES—1 800,300 gallons, Cuba Distilling Co., Cienfuegos
NAPHTHALENE—700 sacks, Order, Havre
OIL—Palm, 945 tons, Order, Hull; **Olive,** 2 cases Order, Antwerp, **Sesame,** 100 drums, Rotterdam
OCHRE—60 sacks, Order, Antwerp
SODA CAUSTIC—345 drums, Order, Liverpool

IMPORTS AT NORFOLK

June 17 to 24

GYPSUM—1,700 tons in bulk, Eastern Cotton Oil Company "Doris Hamlin," Windsor

June 24 to July 1

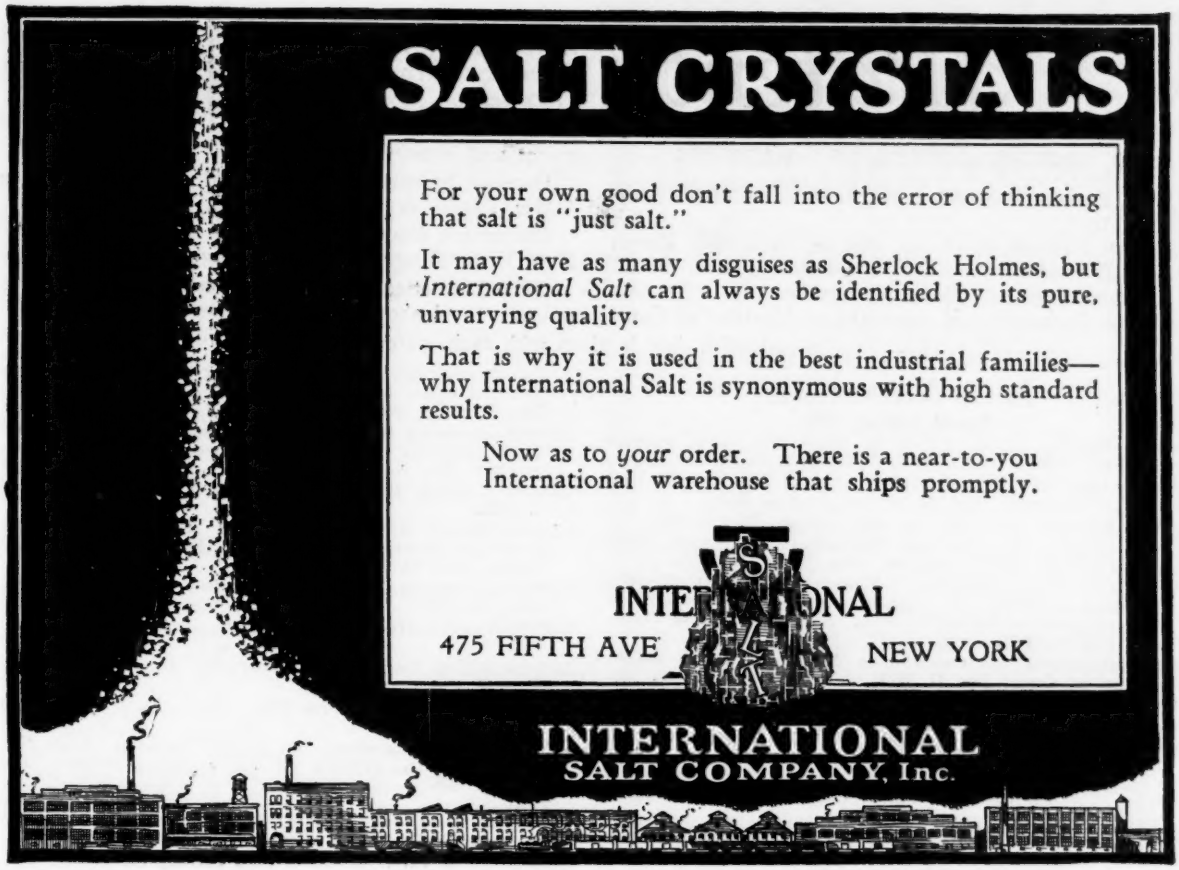
GYPSUM—2,500 tons, C W Priddy & Company, Inc., "Dago," Walton

July 1 to 8

PYRITES—3,250 tons, Pyrites Co. Fosalia Huelva
FERTILIZER HAIR—782 bags, Savannah, Liverpool
NITRATE OF SODA—182 bags, Kuttroff-Pickhardt & Co., Hamburg

July 8 to 15

GYPSUM—1,700 tons Eastern Cotton Oil Co, Chas A Dean, Windsor
POTATO STARCH—500 bags, Stein Hall & Co., Breedijk, Rotterdam
CREOSOTE OIL—632 tons, Equitable Trust Co., Miller Co. Middlesborough; 1,567 tons, Equitable Trust Co, Miller Co., Amsterdam
GLAUBER SALT—500 bags, Lorain, Hamburg
MOLASSES—2,500 tons, Old Dominion Distillers Corp. Cedarhurst, Danzig
POTASH—Muriate, 980 tons, Potash Importing Corp., Lekhaven, Brake; **Kainit,** 1,518 tons, Potash Imp. Corp. Lekhaven, Brake; **Double Manure Salt,** 314 tons, Potash Imp Corp., Lekhaven, Brake; **Manure Salt,** 1,697 tons, Potash Imp Corp. Lekhaven, Brake; 3,700 tons, Potash Imp Corp., Progress Hamburg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Official Gazettes are published weekly by all the patent offices named above and contain selected claims.

Application date is given with each patent.

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Issued June 29, 1926

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1,590,229—Anhydrous Zinc Chloride from lead chloride and zinc. N. C. Christensen, Salt Lake City, June 7, 1923.

1,590,233—Filter. F. F. Frick, Anaconda, Mont., May 5, 1923.

1,590,265—Organic Chlorides from hydrochloric acid and carbon monoxide. R. Thurm, Saginaw, Mich., Aug. 20, 1925.

1,590,266—Continuous Absorption Apparatus. Richard Tiedtke, Hochst-on-the-Main, and Jacob Benz, Niedernhausen a, Taunus, assignors to Farbwerke vorm. Meister, Lucius & Bruening, Aug. 18, 1925.

1,590,273—Apparatus for Conditioning Materials. D. S. Baker, Greenwich, Conn., Jan. 17, 1923.

1,590,287—Liquid Level Indicator. Clarence A. De Giers, N. Y., assignor to Liquidometer Co., May 28, 1920.

1,590,299—Liquid Aerating Apparatus. C. B. Liddell, Dorney Reach, Eng., Dec. 21, 1925.

1,590,305—Cotton Seed Huller. Robert W. McLean, Bridgewater, Mass., assignor to Carver Cotton Gin Co., East Bridgewater, Mass., Feb. 3, 1926

7,590,321—Liquid Feeding Apparatus. J. D. Sartakoff, Forest Hills, N. Y., March 9, 1923.

1,590,393—Blasting Powder Composition. Carl D. Pratt, Tamaqua, Pa., assignor to Atlas Powder Co., Wilmington, May 31, 1924.

1,500,417—Applying Sensitizing Coating to Paper. Harold J. Brunk, assignor to C. F. Pease Co., Chicago, Aug. 1, 1925.

1,590,447—Preserving Wood Apparatus. G. B. Shipley, Pittsburgh, Pa., Aug. 18, 1921.

1,590,462—Tunnel Kiln. W. E. Wilson, Mason City, Ia., and H. G. Lykken, Minneapolis, Minn., June 14, 1924.

1,590,482—Dyestuffs Containing Metals. Fritz Straub, Basle, and Herrmann Schneider, Basle, assignors to Society of Chemical Industry, Basel, April 20, 1924

1,590,494—Concentrating Nitric Acid in a Column. W. Buesching, Halle, Germany, May 14, 1923.

1,590,505—Determining Liquid Level in Vessel Containing Both Liquid and Vapor, Richard W. Hanna and William D. Mason, Richmond, Calif., assignors to Standard Oil Co. of Cal., Jan. 16, 1920.

1,590,518—Gas Compressing Apparatus. William M. Jewell, Chicago, Ill., assignor to Clorine Products Co., Chicago, May 12, 1919

1,590,523—Artificial Marble and Stone. O. Kell, Des Moines, Ia., June 26, 1924.

1,590,531—Hydraulic Unloading of Materials. P. J. Lemaitre, Abbeville, France, Jan. 27, 1923.

1,590,553—Liquid Level Indicator. R. C. Rutzke, St. Louis, Mo., Oct. 6, 1922.

1,590,572—Strainer Cup for Varnish. A. Frederte, Chicago, Aug. 15, 1925.

1,590,592-3—Conversion of Cellular or Fibrous Material. Edwin Taylor and Edward F. Chandler, Brooklyn, N. Y., assignors to Taylor Laboratories, Inc., N. Y., July 29, 1919 and Dec 2, 1919.

1,590,594—Treatment of Fibrous or Cellular Organic Material. Edwin Taylor, assignor to Taylor Laboratories Inc., March 11, 1920.

1,590,595—Manufacture of Cellulose by electrolysis. Thomas A. Hill, Brooklyn, N. Y., assignor to Taylor Laboratories, Inc., May 26, 1920.

1,590,596-7—Making Colloidal Products. Edwin Taylor and Edward F. Chandler, Brooklyn, N. Y., assignors to Taylor Laboratories Inc., Oct. 8, 1920 and June 17, 1924.

1,590,598-609—Cellulose Products Treatment and Apparatus. Edwin Taylor, assignor to Taylor Laboratories, Inc., June 17, 1924, June 17, 1924, June 17, 1924, June 17, 1924, June 17, 1924, June 21, 1924, June 21, 1921, June 21, 1921, June 21, 1921, July 2, 1924, June 17, 1924 and Dec. 2, 1919.

1,590,617—Treating Petroleum Emulsions. Melvin DeGroote, St. Louis, assignor to W. S. Barnickel & Co., Webster Groves, Mo., Dec. 23, 1924.

1,590,622—Producing Sulphurous Acid Gases Apparatus. Ingenuin Hechenbleikner, Charlotte, N. C., assignor to Chemical Construction Co., N. Y., April 1, 1924.

1,590,634—Fertilizer Mixer. M. A. Lokey, Clay County, Ga., Sept. 3, 1925.

1,590,640—Mineral Oil Cracking Process. Tsuguyoshi Mii, Yamaguchi-Ken, Japan, assignor to Kotaro Isomura, Yamaguchi-Ken, Japan. Jan. 19, 1923.

1,590,644—Insulating Compound. Pickstone, Radcliffe, England. May, 11, 1925.

1,590,647—Gravity Mixer. A. J. Sackett, Baltimore, Md., Dec. 3, 1925.

1,590,655—Lining for Grinding Apparatus. H. N. Spicer, N. Y. Dec. 17, 1925.

1,590,656—System of Treating Oil. H. P. Taber, Wilmington, Del. Aug. 19, 1921.

1,590,661—Perylene Compounds of Quinone Character. Alois Zinke, Gratz, Austria, assignor to Felice Bensa, Genova, Italy. April 7, 1925.

1,590,663—Enzymes, isolating them from their solutions. Hans Altgelt and Otto Hochmuth, Biebrich-on-the-Rhine, assignors to Kalle & Co., A. G., Germany. March 17, 1925.

1,590,685—Violet Vat Dyestuffs of the 2-Thionaphthene-2-Indolindigo Series. Richard Herz and Walter Brunning, Frankfort-on-the Main, assignors to Grasselli Dyestuff Corp., N. Y., Feb 11, 1926.

1,590,688—Liquid Screen for Industrial Purposes. Ephraim Honeyman, Milwaukee, Wis., assignor to Chain Belt Co., Milwaukee, Dec. 10, 1924.

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1,590,718—Vat Sulphide Dyes. Fritz Ballauf Friederich Muth and Albert Schmelzer, Elberfeld, Germany, assignors to Grasselli Dyestuff Corp., N. Y. Jan. 16, 1925.

1,590,728—Yellow Azo Dyestuffs. A. Dorrer, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie A. G., Frankfort-on-the-Main, Jan. 4, 1926.

1,590,739—Purification of Iron. George S. Evans, Oak Park, Ill., assignor to Mathieson Alkali Works, N. Y. April 10, 1925.

1,590,782—Transparent Dope from cellulose esters of fatty acids. T. Francois Tesse, Paris, France, assignor to himself and Soc. Nauton Freres & de Marsac, Paris. June 24, 1918.

1,590,784—Artificial Silk Yarn. Suekichi Toda, Sakai-Gun, Japan., Nov. 17, 1925.

1,590,795—Increasing Density of Finely Divided Material, Edwin T. Asplundh, Barberton, O., assignor to Pittsburgh Plate Glass Co., Sept. 22, 1924.

1,590,798—Drier. W. M. Barker, Canton, O., July 31, 1924.

1,590,800—Lubricant. Arman E. Becker, Newark, N. J., assignor to Standard Development Co., Del., March 9, 1922.

1,590,826—Material Handling Apparatus. Frank E. Hulett, Cleveland, O., assignor to Alliance Machine Co., Alliance, O. June 23, 1923.

1,590,841—Water White Mineral Oils. J. R. McConnell, Whittier, Calif., July 27, 1925.

1,590,870—Oil Separating Apparatus. C. F. Williams, Philadelphia, April 30, 1925.

1,590,893—Humidifier. William B. Hodge, Charlotte, N. C., assignor to Parks-Cramer Co., Fitchburg, Mass. April 25, 1923.

1,590,897—Metallic Catalysts. E. J. Lush, London, assignor to Rechnical Research Works, Ltd., London, May 11, 1925.

1,590,901—Destructive Distillation Wood. John Stanley Morgan, London, assignor to Thermal Industrial & Chemical Research Co., London, Oct. 1, 1920

1,590,913—Water Softening Process. F. Schmidt, Dobeln, Germany. Oct. 21, 1925.

1,590,915—Incrustations Removing Composition. M. E. Stewart, Cincinnati, Aug. 25, 1924.

1,590,935—Kiln. H. Freeborough, Fort Scott, Kans. March 7, 1923.

1,590,961—Artificial Resins of phenol-formaldehyde condensation type. R. Singer, Brno, Czecho-slovakia, assignor to Kunstharzfabrik Regal & Co., Brno, Czecho-slovakia. June 17, 1925.

1,590,965—Purification of Hydrocarbons. C. R. Downs, Cliffsdale, N. J., assignor to Barrett Co., July 7, 1920.

1,590,987—Chemical Pulp Cooking Process. G. Sivola, Dexter, N. Y., Dec 4, 1925.

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Issued July 6, 1926

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1,591,023—Coal Coking Apparatus. M. W. Ditto, New York, and William M. Duncan, Alton, Ill. March 29, 1923.

1,591,024—Oil Recovery Apparatus. F. P. Dodge, Port Arthur, Tex., assignor The Texas Co., New York. Aug. 31, 1923.

1,591,049—Anticorrosive Compound. C. D. Murray, Bridgeport, Conn. Sept. 30, 1925.

1,591,053—Rotary Drying Machine. J. A. Reavell, London. Nov. 12, 1923.

1,591,079—Tank Filling Apparatus. C. H. M. Burnham, Columbus and Samuel A. Chadwell, Sugar Grove, O. April 28, 1923.

1,591,084—Denatured Alcohol. E. M. Flores, Buenos Aires, Argentina. June 31, 1921.

1,591,125—Phenyl Ethyl Alcohol Process. I. F. Harlow and E. C. Britton, Midland, Mich., assignors Dow Chemical Co., Feb. 4, 1924.

1,591,132—Vulcanized Rubber Dough Process. F. C. Jones, London. Mar. 5, 1923.

1,591,142—Milk Preserving Process. J. C. Servetti, Reeves, Buenos Aires, Argentina. Jan. 8, 1924.

1,591,147—Separator for Substances of Variant Specific Gravities. S. S. Wales, Pittsburgh, Nov. 26, 1924.

1,591,151—Alkyl Halide Process. J. P. Wibaut, Amsterdam, Holland. Jan. 2, 1924.

1,591,170—Making Sheeting from tacky plastic materials. L. C. Lutyens, London. April 20, 1926.

1,591,196—Lithium Salts Recovery from phosphate minerals. H. Weidmann, Frankfort-on-the-Main, Germany, assignor Allied Process Corp., New York, Nov. 24, 1924.

1,591,235—Activated Carbon Process. H. Rodman, Oakmont, Pa., assignor Rodman Chemical Co., Aug. 21, 1918.

1,591,245—Benzoic Acid from Benzotrichloride. F. E. Stockelbach, Douglaston, N. Y., assignor Mathieson Alkali Works, New York. May 26, 1921.

1,591,253—Oxide of Zinc, Lead, and other metals, process. L. E. Wemple, St. Louis, assignor American Zinc Lead & Smelting Co., Boston. Feb. 17, 1920.

1,591,270—Fertilizer from ground phosphate rock and calcium nitrate, H. Blumenberg, Jr., Los Angeles, assignor Stockholders Syndicate. May 12, 1925.

1,591,271-2—Treating Phosphate Rock. H. Blumenberg, Jr., assignor Stockholders Syndicate. June 23, 1925 and Aug. 7, 1925.

1,591,283—Pulverizing Machine. E. Charton and P. M. Mingereau, Paris, Nov. 26, 1923.

1,591,360—Determining Elastic Properties of Plastic Materials, Apparatus. M. Chopin, Boulogne, France, assignor Societe d'Exploitation de Brevets et d'Applications Industrielles, Nancy, France. Jan. 26, 1925.

1,591,364-5—Alumina Alkali and Dicalcium Silicate, Process. A. H. Cowles, Sewaren, N. J., assignor Electric Smelting & Aluminum Co., Cleveland. Nov. 21, 1915.

1,591,373—Acid Proof Drum, and process of making. R. T. Griffiths, Akron, assignor Miller Rubber Co., Akron, O. Nov. 27, 1925.

1,591,384—Diaminodiaryldialkylmethanes, Process. B. Homolka, Frankfort, Germany, assignor, Grasselli Dyestuff Corp., New York. Sept. 19, 1923.

1,591,397—Filling Mass for Containers for Explosive Gases. C. Ness, Indianapolis, assignor Prest-O-Lite Co., Aug. 24, 1925.

1,591,428—Treating Hydrocarbon Oils. C. Matlock, assignor Gasoline Corp., New York. Sept. 27, 1920.

1,591,432—Gas Impervious Container. P. O. Noble, assignor General Electric Co., Schenectady, N. Y. May 5, 1922.

1,591,439 and 1,591,441—Accelerating Vulcanization of Rubber. L. B. Sebrell, assignor Goodyear Tire and Rubber Co., Akron. Nov. 5, 1923.

1,591,440—Thiazols Manufacturing Process. L. B. Sebrell and C. W. Bedford, assignors Goodyear Tire & Rubber Co., Akron. Dec. 7, 1921.

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1,591,472—Electrical Dehydration of Emulsions. J. H. Christoph de Breym, The Hague, Holland. March 26, 1925.

1,591,499—Changing Light Sensitiveness of Photographic Emulsions. S. E. Sheppard, assignor Eastman Kodak Co., Rochester. Dec. 2, 1925.

1,591,513—Air Cooler. E. R. Cook, Oakland, Calif. April 26, 1924.

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1,591,526—Motor Fuel from carbon monoxide. W. Gaus and F Lappe, Ludwigshafen, assignor Badische Anilin & Soda Fabrik, Germany. April 29, 1924.

1,591,534—Insulating Electrical Coils with phenolic-aldehyde resins. J. Kessler, St. Louis. Feb. 28, 1924

1,591,563—Plastic Material from non-plastic oxides. O. Ruff, Breslau, Germany. Nov. 18, 1922.

1,591,577—Drying Apparatus. R. Thelen, Madison, Wis., dedicated, by mesne assignments, to Citizens of U. S. A. Sept. 12, 1924.

1,591,583—Evaporation and Cooking of Sugar Juices. A. R. Vila, Havana. Jan. 28, 1925.

1,591,590—Cellulose Acetate Process. W. R. Webb and C. J. Malm, assignors Eastman Kodak Co., Rochester.

1,591,619—Phthalic Anhydride from alkyl napathalene. H. D Gibbs, Penns Grove, N. J., assignor E. I. du Pont de Nemours & Co., Wilmington, Oct. 30, 1920.

1,591,630—Removing Liquid from Cyanides. C. R. Jacobs, assignor E. I. du Pont de Nemours & Co., Wilmington. Feb. 24, 1921.

1,591,634—Liquid Replenishing System. J. M Lea, Detroit. Oct. 24, 1921.

1,591,645—Treating Liquids Contained in Closed Vessels. R. Rafn, Moss, Norway. Nov. 3, 1923.

1,591,652—Cellulose Acetate Compositions. B. K. Brown and C. Bogin, assignors Commercial Solvents Corp., Terre Haute. Oct. 14, 1925.

1,591,662—Cement and process. E. C. Eckel, Washington. Mar 31, 1926.

1,591,665—Liquid Fuel. G. J. Esselen Jr., Swampscott, Mass., assignor United Fruit Co., Boston, Feb. 26, 1924.

1,591,672—Distilling Bituminous Coal with recovery of gaseous distillate. R. M. Folsom, Reading and C. A. Raymond, Essex, Mass., assignors New England Fuel & Transportation Co., Boston. Aug. 19, 1925.

1,591,676—Refractory and Heat Insulating Cement. H. Gallinowsky Richmond Heights, Mo., assignor General Insulating & Mfg. Co., Alexandria, Ind., Oct. 23, 1924.

1,591,688—Benzidine Flakes. W. L. Spalding, Buffalo, assignor National Aniline & Chemical Co., New York. June 18, 1923.

1,591,703—Rod Mill. R. C. Greenfield, assignor Allis-Chalmers Mfg. Co., Milwaukee, June 19, 1922.

1,591,712—Purifying Anthraquinone. H. F. Lewis, Buffalo, assignor National Aniline & Chemical Co., New York. March 4, 1920.

1,591,714—Pasteurized Butter or Oleomargarine Process H. W. Low and S. C. Williams, Oakland, Calif. July 2, 1923.

1,591,715—Sublimation Process. C. A. Lyford, East Aurora, N. Y., assignor National Aniline & Chemical Co., Inc., New York. Apr. 2, 1920.

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1,591,720—Alkali Metal Cyanides. Floyd J. Metzger, assignor California Cyanide Co., New York. July 15, 1924

1,591,723—Alkali Metal Xanthogenates. E. C. Missbach, Berkeley, Calif. June 1, 1925.

1,591,725—Evaporation of Brines. R. W. Mumford, Trona, Calif., assignor American Trona Corp., New York. Aug. 15, 1922.

1,591,728—Separating and Purifying Oil. W. E. Trent, Washington, assignor Trent Process Corp. Aug. 11, 1920.

1,591,729—Recovering By-products from Coal. W. E. Trent Washington, assignor Trent Process Corp. March 18, 1922.

1,591,735—Motor Fuel. J. F. Beattie, Hurley, N. Mex. Nov. 11, 1925.

1,591,744—Treating Hydrocarbons with bentonite. R. Cross, Kansas City, Mo. Dec. 22, 1921.

1,591,752—Fireproofing and Waterproofing Wood. W. P. Ferguson, Brooklyn. May 13, 1925.

1,591,758—Pulverizing Machine. P. W. Griffin, Enfield. England, assignor of one half Vickers Ltd, Westminster. July 20, 1923.

1,591,767—Lubricants in Rubber Vulcanization. C. E. Matnard, Northampton, Mass., assignor Fisk Rubber Co., Chicopee Falls, Mass. June 9, 1925.

1,591,795—Manganese Arsenates Process W. L. Tanner, Cleveland, assignor Grasselli Chemical Co., July 30, 1923.

1,591,798—Treating Alunite. G. S. Tilley, Berkeley, Calif. May 20, 1924.

1,591,821—Revolving Screen. H. C. Heaton, Chicago. Sept. 13, 1924.

1,591,842—Reducing Inflammability and Explosiveness of Hydrocyanic Acid. F. Kerschbaum, Frankfort, assignor Roessler & Hasslacher Chemical Co., New York. Dec. 23, 1925.

1,591,853—Dehydrating Petroleum Oils. W. J. MacArthur, Los Angeles. May 17, 1923.

1,591,879—Refining Sugar Juice By Chlorination. Shuichiro Ochi, Toyotama and Fusaziro Kotera, Ebara, Japan. Dec 3, 1924.

1,591,899-900—Stabilizing Liquid Hydrocyanic Acid. M. Walker, assignor Pacific R. & H. Chemical Corp., Los Angeles. April 6, 1924.

1,591,915—Slurry Agitating Apparatus. P. T. Linhard, Brooklyn, assignor F. L. Smith & Co., New York. Aug. 4, 1924.

1,591,916—Ball Mill. P. T. Linhard, Brooklyn, assignor F. L. Smith & Co., New York. Aug. 15, 1925.

1,591,919—Burr Mill. G. E. Chamberlain, Decatur, Ill. Nov. 25, 1921.

1,591,922—Treating Artificial Silk Fibers with formaldehyde. H. Karplus, Frankfort. June 2, 1924

1,591,923—Siphon Filter Harry J. Lelherz, assignor Everedy Co., Frederick, Md. Nov. 20, 1925.

1,591,932—Replacing Air in Filled Containers with Inert Gas. J. M. Young, Brooklyn, assignor American Can Co., New York. Jan. 11, 1924.

1,591,936—Removing Solids from Gases. M. I Dorfan, New York, assignor Allis Chalmers Mfg. Co., Milwaukee. April 4, 1921

1,591,941—Comminuting Mill. R. C. Newhouse, Wauwatosa, Wis., assignor Allis-Chalmers Mfg. Co., Milwaukee. June 9, 1921.

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Issued June 2, 1926

249,988—Polishing Compositions. J. Schwarzkopf, Elmshorn, Holstein, Germany, Feb. 24, 1925.

249,993—Flavanthrone Dyes. British Dyestuffs Corp., J. Baddiley and A. Shepherdson, Manchester, March 5, 1925.

249,998—Drying Mixing and Screening Machine. E. E. Welch, Letchworth, Hertfordshire, March 18, 1925.

250,018—Insecticides. W. Taylor, Motherwell, Lanarkshire, April 8, 1925.

250,019—Liquid Fuel. R. DeSarigny, Cape Town, S. Africa, April 8, 1925.

250,045—Lime In Rotary Furnaces. I. Warner, Wilmington, Del., May 15, 1925.

250,047—Separating Liquids and Liquid Masses. P. Kopp and K. Fink, Herrenberg, Wurttemberg, Germany. May 18, 1925.

250,075—Azo Coloring Matters. Badische Anilin & Soda Fabrik, Ludwigshafen-on-Rhine, July 13, 1925.

250,078—Silica Gel. Chemische Fabrik auf Akt. vormals E. Schering, and W. Klaphake, Berlin, July 20, 1925.

250,102—Treating Hydrocarbon Oils with Aluminum Chloride. Gulf Refining Co., Port Arthur, Texas, Sept 11 1925.

250,108—Saponaceous Cleansing Compositions. R. Vidal, Asnieres, Seine, France, Sept. 30, 1925.

250,132—Iron Carbonyl. Badische Anilin und Soda Fabrik, Ludwigshafen-on-Rhine, Nov. 25, 1925.

250,149—Thermometers H. H. Zela, London, Jan. 15, 1926.

250,163—Atomizers. H. C. McDonald, N. Y., Aug. 27, 1925.

250,167—Rubberized Fabrics with aid of latex. General Rubber Co, N. Y., assignees of M. C. Teague, New York, N. Y., Sept. 14, 1925.

250,178—Preparing Skins for Use Without Tanning. A. J. Clermontel, Jan. 15, 1926.

250,180—Insecticides. I. G. Farbenindustrie A. G., Frankfurt-on-Rhine, assignees of Farbenfabriken vorm. F. Bayer & Co., Leverkusen, Germany, Jan. 21, 1925.

250,182—Alkali and Alkaline Earth Cyanides and Ammonia Gewerschaft Sachsen-Weimar, Unterbreizbach-on-Rhine, Feb. 5, 1926.

250,185—Charging and Surcharging Apparatus. E. E. Brosius, Pittsburgh, Feb. 15, 1926

250,197—Delivering Measured Quantity of Liquid. R. Sutter, St. Imier, Switzerland, March 11, 1926.

250,199—Formic Acid of High Concentration. Chemische Fabrik auf Actien, vorm. E. Schering Berlin, March 12, 1925.

250,208—Barium Carbonate and Silicates. C. Deguide, Enghein, Seine et Oise, France, March 18, 1926

250,211—Complex Hydrofluoric Acids. A. F. Meyerhofer, Zurich, Swit., March 19, 1926.

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Issued June 3, 1926

250,219—Filaments from Cellulose Xanthate. P. Moro, Marseilles, France March 24, 1926.

250,220—Gasifying Heavy Hydrocarbons. L. Mirlesse, Paris. March 4, 1926.

250,224—Roasting Furnaces. O. Dobbelstein, Essen, Germany. March 26, 1926.

250,241—Salphonic Acid as Wetting Agents. I. G. Farbenindustrie A. G., Frankfurt, assignees Farbenwerke vorm. Meister Lucius & Bruening, Hoechst-on-Main, Germany. March 30, 1926.

250,246—Aluminous Cement Process. Soc. Anon. des Chaux et Ciments de Lafarge et du Teil, Viviers, Ardeche, France. March 31, 1926.

250,247—Acetylene Generators, regulating head of liquid directly. A. Wagner, Ludwigshafen on Rhine, assignee, P. Schifer, Ludwigshafen, Germany. March 31, 1926.

250,248—Gas Analyzing Apparatus. M. Chopin, Boulogne-sur-Seine. March 31, 1926.

250,250—Salts of Ortho Aminophenylpropionic Acid. process. I.

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G. Farbenindustrie, A. G., assignees Farbewerke Meister, Lucius & Bruening, Germany. March 31, 1926.

250,251—Vat Dyes In Solid Form. Soc. of Chemical Industry in Basle, Switzerland. March 31, 1926.

250,265—Polyvalent Metallic Salts of Monoalkyl Esters of Phthalic Acid, as synthetic resins. Commercial Solvents Corp., assignees of E. R. Littmann, B. K. Brown and W. J. Bannister, Terre Haute, Ind. April 1, 1926.

250,274—Fumigants containing carbon monoxide. H. Sauer, Augsburg, Germany. April 6, 1926.

250,279—India Rubber Compositions from latex. W. B. Wiegand, Kitchener, Ontario, Canada. Sept. 29, 1924.

250,283—Dyeing and Finishing Fabrics. J. Huebner, Cheadle Hulme, Cheshire, England. Oct. 10, 1924.

250,291—Purifying Carbonaceous Materials. B. Laing, Hatfield, Hertfordshire and H. Nielsen, London. Nov. 27, 1924.

250,298—Printing Roller Compositions containing gelatine and glyderine, process. J. Kidd & Co., and P. Squire, London. Dec. 11, 1924.

250,302—Coking Process. W. R. Hume, Melbourne, Australia. Dec. 29, 1924.

250,303—Artificial Silk Apparatus. Viscose Co., Marcus Hook, Pa. Dec. 31, 1924.

250,318—Cooling and Heating Granular Materials, apparatus. J. S. Fasting, Copenhagen. Jan. 5, 1925.

250,319—Density Separators. P. P. Harvey, London and H. J. Holford, Addiscombe, Surrey. Jan. 5, 1925

250,334—Rolling Explosives, apparatus. Greenwood & Batley, Ltd., Leeds and J. H. Barker, Harrogate, Yorkshire. Jan. 12, 1925.

250,344—Sifting Apparatus. K. C. Appleyard, Durham, P. W. Bewick, Newmarket, Cambridgeshire, Sir J. F. Laycock, Bawtry, Nottinghamshire, M. R. Portal, Swansmore, Hampshire and W. E. Manners, Mayfair, London. Jan. 15, 1925.

250,345—Indicating Contents of Tanks. D. Doyle, Sydenham, London. Jan. 19, 1925.

250,360—Purifying and Separating Liquids by Gravity, apparatus. B. D. Comyn and W. A. White, Hebburn-on-Tyne, Northumberland. Feb. 10, 1925.

250,385—Spray Producers. Koppers Co., Pittsburgh, U. S. A. March 25, 1925.

250,392—Mercerizing Apparatus, hank type. P. Caldwell, and British Cotton & Wool Dyers' Association, Manchester. April 6, 1925.

250,393—Rotary Sifting Apparatus. Butterley Co., Ltd., and G. F. Wright, Derby. April 15, 1925.

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Issued June 10, 1926

30,744 Addition to 597,728—Fertilizer Containing Urea Lime Nitrate. Badische Anilin und Soda Fabrik, July 11, 1925.

30,734 Addition to 570,869—Preservation of Fruits and Vegetables. J. Flach. July 6, 1925.

609,849—Sulphurous Acid Injector. L. Rigal, May 6, 1925.

609,827—Wool Washing Apparatus, E. C. Duhamel & Compagnie Generale des Industries Textiles, May 4, 1925.

609,864—Rubberized Fabrics. Dunlop Rubber Co., Jan. 22, 1926.

609,907—Linoleum. Lobositzer, A. G. Zur Erzengung Vegetablisher Oele and G. Dubsky, Jan. 23, 1926.

609,996—Liquid Elevating System, Especially applicable to oil wells. M. Mougiu, May 7, 1925.

609,824-5—Aluminous-Calcareous Cements Manufacture, by sintering. U. B. Veisin, May 4, 1925.

609,865—Treating Crude Baryta. K. Ebers. Jan. 22, 1926.

609,868—Milk of Lime Purifier. F. Moret, Jan. 22, 1926.

609,909—Alkaline Salts of Carboxylic Acids of Alkaline Aromatic Halogenated and Sulphonated Amines. Chemische Industrie und Handels A. G., Jan. 23, 1926.

609,931—Converting Sulphuretted Hydrogen Into Sulphurous Acid. Friedrich Siemens A. G., Jan. 25, 1926.

610,010—Improved Ammonia Oxidation Process. F. G. Liljenroth. Jan. 26, 1926.

609,937—Chrome containing Coloring Matters, Societe pour l'Industrie Chimique a Bale, Jan. 25, 1926.

30,735 Addition to 563,579—Indigo Coloring Matters, Soc. pour l'Industrie Chimique a Bale. July 7, 1925.

30,749 Addition to 551,666—Printing and Dyeing of Textiles, M. Bader and C. Sunder, July 17, 1925.

609,843—Removing Free Fatty Acids From Fats Soc. Anonyme des Etablissements Rocca, Tassy et de Roux. May 5, 1925.

610,012—Resinous Condensation Products, free from acids, from phenols and aldehydes. Bakelite Gesellschaft m. b. H., Jan. 26, 1926.

609,840—Filtering Liquids, A. F. Gasquet and A. J. Bacque, May 5, 1925.

609,880—Elektrical Purification of Gases. Siemens Schuckert Werke G. m. b. H., Jan. 23, 1926.

609,932—Electrical Separation of Dust, particularly in low temperature distillation plants. Siemens Schuckert Werke G. m. b. H., Jan. 25, 1926.

609,933-6—Electrical Separation of Gaseous Impurities. Siemens Schuckert G. m. b. H. Jan. 25, 1926.

609,955—Filtering Device, Fritz Schreibler, Jan. 25, 1926.

609,985-9—Electrical Purification of Gases, Siemens Schuckert G. m. b. H., Jan. 26, 1926.

609,904—Dyeing Leather With Azo Acid Dyes I. G. Farbenindustrie A. G., Jan. 23, 1926.

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610,037—Dyeing Process and Apparatus. T. McConnell. Sept 17, 1925.

610,090—Treating Textiles with Liquids, Apparatus. A. G. W. Schmid-Koechlin. Dec. 31, 1925.

610,032—Improved Pulp Drier, in paper making. St. Anne's Board Mill Co., Ltd., and R. Blyth Heys. Aug. 12, 1925.

610,094—Cascade Aspirating Separator, for removing fine particles. G. Wyssling. Jan. 5, 1926.

610,173—Removal of Solids from Waste Waters and other liquids, apparatus. Geiger'sche Fabrik G. m. b. H. Jan. 28, 1926

610,217—Manometric Gauge. G. Botali and M. Lebean. Jan. 29, 1926.

610,073—Electrolytic Apparatus, especially for making hydrogen and oxygen. J. E. Noeggerath. Dec. 19, 1925.

610,121-2—Citric Acid from Cane Sugar by fermentation. P. Fernbach, J. L. Guill, B. G. McLellan, and Browntree & Co., Ltd. Jan. 21, 1926.

610,160—Oxidation of Ammonia. F. G. Liljenroth. Jan. 27, 1926.

610,250—Low Tension Discontinuous Discharge for nitrogen oxides formation L. G. Patronilleau. Jan. 29, 1926.

610,261—Diazo Preparations. I. G. Farbenindustrie A. G. Jan 29, 1926.

30,783 Addition to 570,995—New Naphthalene Derivative, process and coloring matters derivatives. Societe pour l'Industrie Chimique a Bale. April 11, 1925.

610,030—Liquid Air or Oxygen Explosives Les Petits-Fils de Francois de Wendel et Cie. July 30, 1925.

610,101—Elimination of Incrustating Salts etc. from soap waters. G. Ullmann. Jan. 12, 1926.

610,124—Retort. I. B. Newbery, Jan. 22, 1926.

30,796 Addition to 606,605—Adherent Protective Coating for various surfaces. Societe Anonyme Parfumerie et Savonnerie Gilot. April 28, 1925.

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610,107—Artificial Resins from Phenols and Aldehydes. A. Regal, Jan. 15, 1926.

610,034—Liquefaction and Separation of Gaseous Mixtures. R. K. E. Mewes. May 2, 1925.

610,042—Activated Carbon, process and apparatus. Algemeene Norit Maatschappij. Oct. 9, 1925.

610,100—Centrifugal Purifiers with Gas protectors. Aktiebolaget Separator. Jan 12, 1926.

610,139-142, 610,181-185—Electrical Purification of Gases, process and apparatus Siemens-Schuckert werke G. m. b. H. Jan. 27, 1926 (first set). Jan. 28, 1926 (second set).

30,781 Addition to 597,141—Removal of Residual Carbon Monoxide and Methane, from partial liquefaction of water gas, etc. Societe L'Air Liquide, Societe Anonyme pour l'Etude et l'Exploitation des Procedes Georges Claude. April 9, 1926.

30,800 Addition to 567,979—Fermentation and Distillation of beets, with thick wort. Societe des Etablissements Barbet. April 29, 1925.

610,197—Pyrogenous Decomposition of Distillation Products, from crude bituminous matter. Braunkoklen Produkte A. G. Jan. 28, 1926.

30,787 Addition to 563,777—Phenol-formaldehyde Plastic Societe des Veneries de Folembray. April 16, 1925.

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Issued June 17, 1926

427,961—Dyeing and Printing Textile Fibers, Paper and Similar Materials, Rhenania Offag, Mineralolelwerke A. G., Duesseldorf, April 13, 1923.

428,038—Dyeing Jute, and other similar substances, with sulphite cellulose waste liquors. I. G. Farbenindustrie A. G., Frankfurt a. M., Germany, July 5, 1924.

428,039—Fixing Dyes on Cotton. I. G. Farbenindustrie A. G., Frankfurt a. M., Sept. 23, 1923.

427,997—Soluble Vat Dye Preparations. I. G. Farbenindustrie A. G, Dec. 11, 1923

427,962—Toning Ice Colors. I. G. Farbenindustrie A. G., March 17, 1925.

427,953—Dyeing Animal Fibers Several Colors. Lanil A. G., Basel, Feb. 8, 1919.

428,087—Continuous Process Recovery Sulphur. I. G. Farbenindustrie A. G., Frankfurt a. M., March 14, 1925.

427,998—Highly Activated Silicic Acid Gel. I. G. Farbenindustrie A. G., Oct. 5, 1922.

428,041—Highly Absorbent Silicic Acid I. G. Farbenindustrie A. G., June 21, 1924.

428,137—Sodium Nitrate from nitric acid on glauberite. I. G. Farbenindustrie A. G., Aug. 12, 1924.

428,088—Oxidation Products of Acenaphthene. I. G. Farbenindustrie A. G., Germany, Oct. 21, 1921.

427,999—Tanning Agents, from nitronaphthalene and bisulphite. I. G. Farbenindustrie A. G., Nov. 27, 1920.

428,093—Yellow Mono Azo Colors. I. G. Farbenindustrie A. G., Sept. 21, 1924.

427,969—Nitrogen Containing Anthraquinone Derivatives. I. G. Farbenindustrie A. G., Frankfurt a. M., Feb. 19, 1924.

427,970—Sulphur Containing Condensation Products. I. G. Farbenindustrie, A. G., Nov. 2, 1922.

428,004—Adhesive Composition containing animal waste. Jacob Samuel, Bonn, a. Rh., Sept. 4, 1924.

428,005—Still With Preheater for Mineral Oils. Richard Neumann, Bruenn, Aug 8, 1918.

428,094—Motor Fuel containing alcohol, naphthalene and the like. Joseph de Cosmo, Neuilly sur Seine, France, Dec. 13, 1922.

428,058—Plastic Celluloid or Rubber Containing Masses or Lacquers from cellulose derivatives. Dr. Eberhard Meyer, Troisdorf b. Koeln a Rh., and Dr. Walther Claasen, Koeln, a Rh., Oct. 18, 1922.

428,035—Wool Washing Machine. H. Kranz Maschinenfabrik, Aachen, Jan. 14, 1925.

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Issued June 24, 1926

428,176—Dyeing Cellulose Esters, particularly cellulose acetate silk. I. G. Farbenindustrie A. G., Frankfurt a. M. March 1, 1924.

428,263—Dyeing Artificial Threads from Regenerated Cellulose, such as viscose silk or mixed goods. E Oswald Sanner, Baerenstein, Germany. April 27, 1923.

428,238—Fast Shades on Animal Fibers. I. G. Farbenindustrie A. G., Frankfurt a. M. June 24, 1923.

428,303—Preventing Injury to Printing Rolls by the use of highly viscous mineral oils and tar ingredients. A Holtmann & Co., G. m. b. H, Charlottenburg. Dec. 15, 1923.

428,206—Carbonization of Organic Ingredients of Sulphite Waste Liquors. Dr. Carl G. Schwalbe, Eberswalde, Germany. Jan. 31, 1924.

428,208—Apparatus for Low Temperature Carbonization. Fanny Zuyderhoudt nee Entnoven and Yvonne Zuyderhoudt, Brussels, Sept. 26, 1924.

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428,264—Evaporation of Liquids by Atomization. Dr. Jacobus Hendrikus Akkerman, Rotterdam. Oct. 26, 1924.

422,321—Carrying Out Reactions Under Pressure, apparatus. Badische Anilin & Soda Fabrik., Ludwigshafen, a. Rh. April 7, 1922.

428,177—Digesting and Melting Processes, apparatus. Dr. Gustav Hall, Berlin. June 17. 1924.

428,305 Addition to 389,294—Chemical Reactions Between Gases. Vapors and Liquids in compressors. Marcus Brutskus, Berlin-Lichterfelde. April 22, 1923.

428,225—Hydrobromic Acid Process. J. D. Riedel A. G., Berlin-Britz. Jan. 11, 1923.

419,522—Sodium Thiosulphate Process. Rhenania Verein Chemischer Fabriken A. G. Mannheim and Dr. Friedrich Ruesberg, Mannheim. Oct. 20, 1921.

428,239—Copper Arsenate or Copper Arsenite Process. I. G. Farbenindustrie A. G. Frankfurt a. M. Sept. 16, 1924.

407,656—Carbon Disulphide Process. Dr. Hubert Schultz, Potsdam. April 1, 1923.

428,240 Addition to 390,619—Manufacture of Perylenes. Felice Bensa, Genoa. June 27, 1922.

428,241—Ester-Like Compounds of Vat Coloring Matters. Durand & Huguenin, Basle, Switzerland. April 5, 1924.

428,185—Dyes of the Dibenzanthrone Series. I. G. Farbenindustrie A. G., Frankfurt a. M. Aug. 2, 1924.

423,320—Color and Lake Mordant. Chemische Fabrik Ludwig Meyer, Mainz, Germany. Nov. 22, 1924.

425,181—Recovery of Chromium As Chromate from Chrome-Containing Wastes. I. Mayer & Sohn, Lederfabrik, Offenbach a. M., Germany. June 17, 1924.

428,189—Artificial Silk Spinning Liquor from solution of Potassium xanthogenate in caustic potash. N. B. Nederlandsche Kunstzijdefabriek, Arnhem, Holland. Aug. 15, 1923.

428,292—Bleaching of Sausage Casings. Chemische Werke Kirchhoff & Neirath G. m. b. H., Berlin. Feb. 7, 1925.

408,224—Drying and Distilling Combustibles in Rotary Drums. Deutsche Luftfilter Baugesellschaft m. b. H., Berlin. July 9, 1921.

CHEMICAL DEVELOPMENTS IN THE PAPER INDUSTRY

(Continued from page 434)

against a stone revolving in water was discovered, but this product was not used alone any more then than now, rag pulp being mixed with it, as chemical pulp is in present day practice. Chemistry, however, found no application in papermaking until the process of cooking wood with a solution of caustic soda was invented by Burgess and Watt in 1852. Prior to that time papermaking was purely a mechanical art, the cooking of rags with lime or soda being merely a detergent process for the removal of natural waxes, oils, grease and dirt, though some loosening or disintegration of fibers was also brought about.

While it is true that the paper industry is indebted to the work of the mechanical engineer for its greatest development during the early stages of its evolution, in modern times its expansion has depended to an even greater extent on the contributions of the chemical engineer, for the processes of pulp manufacture are especially typical of modern chemical engineering.

The larger chemical operations are concerned with the preparation of the cooking liquors used in the chief processes of pulp manufacture—the sulphite, the soda, and the sulphate. Salt, soda ash, salt cake, sulphur and lime constitute the heavier chemicals used in production of paper pulp from wood; chlorine free or combined is used as a bleaching agent. Chlorine and soda are purchased in the same way as sulphur, salt, salt cake and lime, but many of the larger producers of pulp and paper make their own chlorine and soda by the electrolytic process which explains the item of salt in the foregoing enumeration. A surplus quantity of caustic soda and chlorine is produced in some mills, depending on the process employed, so that some pulp and paper firms are heavy dealers in these by-product chemicals. Liquefied chlorine is extensively employed and it is in this form that one large manufacturer disposes of all excess production, though considerable amounts are also turned into chloroform by a process which makes use of acetone obtained in the reclamation of liquors that have served their purpose in the cooking of wood for reduction to pulp.

As manufacturers of strong bleached sulphite pulp as well as kraft and bond papers and within a recent period, of alpha cellulose—the closest approach to a pure rag pulp—the firm referred to occupies a unique position in the industry. Few of those who are actively engaged in paper manufacture are aware, however, of the great volume and variety of by-product chemicals that are produced in this pulp and paper plant. A glance at the accompanying flow sheet of operations in the chemical plant of this paper mill will show that Berlin, N. H., has reason to be considered one of the greatest chemical centres east of Niagara Falls.

The train of operations begins in the electrochemical department of the mill with salt and electrical energy from which are produced chlorine, caustic soda and hydrogen. The chlorine gas is made to undergo a liquefaction process and in the liquid form it is shipped in tank cars to other mills in the New England territory for use in the bleaching of paper pulp and other purposes.

The weak caustic liquor as it comes from the electrolytic cells is conveyed to heated receptacles, where it is evaporated and used to form solid and flake caustic, of which some forty tons a day are produced for sale on the outside.

At the other end of the line hydrogen gas is evolved and either combined directly with chlorine to form hydrochloric acid, or mixed with lime and water to make bleach liquor, which is shipped as such, or is combined with arsenous acid to form calcium arsenate.

Perhaps the most remarkable development of this electrolytic plant is concerned with the manufacture of chloroform, for two-thirds of all the chloroform used for surgical anesthesia in the United States is said to be made at this pulp and paper plant and of a purity surpassing the most exacting pharmacopoeial requirements.

When the mill was visited last month, most of the hydrogen formed in the electrolytic production of chlorine and caustic soda was going to waste, only a fractional amount being saved for the manufacture of hydrochloric acid by direct combination of hydrogen and chlorine as stated above. Up to a year or two ago the hydrogen now wasted was used for hardening vegetable oils in the production of a cooking fat by a catalytic process. It is understood that as soon as the company's peanut plantations begin to yield goobers, the manufacture of this lard substitute will be resumed. During litigation with a soap company over patents on the process a few years ago, control of the peanut output was lost and when the paper mill won the patent suit and was ready to start up again, supplies of peanuts were difficult to obtain except at a prohibitive price. Now that the company has taken up peanut culture on a large scale, it should not be long before an adequate supply of raw material is available.

Apart from pulp and paper, lumber and kyanized lumber—as wood preserved with corrosive sublimate is called after the name of the inventor, Kyan—the by-products of the mills include lignin or concentrated sulphite waste liquor, which is sold in tank cars for use as a road binder, core compound, briquetting agent and tanning extract; sulphur chloride, used for chemical processes of chlorination in one form and in another form for the vulcanization of rubber or of oils, and in making rubber substitutes and cements, as well as in the manufacture of military poison gas; carbon disulphide, the rubber solvent, insecticide and necessary ingredient in the manufacture of rayon, as well as of varnishes,

matches, etc.; and carbon tetrachloride, used largely in the manufacture of fire extinguishers and unburnable cleaning fluids, is also made in large quantities.

For the production of chemical pulp the wood in small chips is boiled under pressure, either with caustic soda to produce soda pulp, or with a mixture of caustic soda, sodium carbonate, sodium sulphide and sodium hydrosulphide for kraft or sulphate pulp, and with bisulphite of lime and sulphur dioxide for sulphite pulp. The neutral sulphite of soda is beginning to be used in the pulping of grasses, straws and woods, as notwithstanding a higher initial cost as compared with the bisulphite of lime process, the recovery of chemicals is more complete so that there is no effluent of any kind to pollute the water-courses or streams on which all pulp and paper mills are so dependent, either as carriers of materials in the various processes or as sources of power.

In the sulphite process, which is used almost exclusively for coniferous woods, the chipped wood is cooked for a period of eight hours in a liquor made by the absorption of sulphur dioxide gas in milk of lime, or by forcing the gas as it comes from the sulphur burner into a tower filled with limestone through which water trickles to combine with the SO_2. The cooking is effected in large steel digesters capable of holding 30,000 gallons of cooking liquor and 20 tons of wood to yield 10 tons of finished pulp. The digesters are lined with an acid-resisting brick laid in an acid-resisting mortar to prevent contact of the acid solution with the metal sides of the digester.

As already mentioned the soda process consists of boiling the wood for a period of four to six hours, the length of time depending on the wood, in a solution of caustic soda, made by causticizing soda ash with common lime. Caustic soda liquor is also a direct product of the electrolysis of salt and many of the larger mills produce caustic in this way. At the end of the cook the pulp is washed and the cooking liquor and washings are saved and evaporated for the recovery of soda, which is done by burning the concentrated mass to an ash in revolving incinerators, the smelt, consisting of sodium carbonate, being extracted in a battery of diffusion cells. It has been proposed recently to spray the unevaporated liquor directly into a stationary furnace which has been preheated to the soda fusing point. The carbonaceous matter contained in the liquor is completely burned out and the molten soda flows freely into a tank of water which is kept in motion by revolving agitators so that complete solution is effected. More than 85 per cent of the soda originally used in making up the cooking liquor is regenerated, any losses being made up with new soda ash.

In the sulphate or kraft process, which does not differ in modus operandi from the soda process, the alkali consumed in cooking is replaced with sodium sulphate in the incineration of the spent liquor, so that the resulting ash on being leached gives a solution containing various quantities of sodium carbonate, sodium hydroxide, sodium sulphide, sodium sulphate and sodium sulphite. The sulphate process has several advantages over both the sulphite process and the soda process, chief of which are the higher yields of pulp and the employment of a cheaper source of alkali. There is however a very distinctive and objectionable odor always associated with the process and this has operated to limit the erection of sulphate pulp mills to localities far distant from centers of population. Methyl mercaptan and dimethyl sulphide, formed in the cooking process and expelled to the atmosphere in the blow-off gases, are evil-smelling compounds which give kraft mills the bad odor attributed to them.

The chemist's contact with the pulp and paper industry grows more important year by year. In addition to laboratory control and standardization of processes and materials, a check is kept on the strength and purity of all raw materials entering the plant, so that extensive laboratories are maintained in all the larger paper mills.

DYE IMPORTS

(Continued from page 445)

Dye and Maker	Pounds
Sandothrene blue NG—S	100
Soledon brilliant purple RR paste—SD	15
Soledon yellow G—SD	15
Vat blue RZ dbl paste (SS)—IG	4,928
Vat blue green B dbl. paste (SS)—B	996
Vat khaki GG paste—IG	1,500
Vat printing red BG paste—IG	300
Vat scarlet G extra—S	50
Vat yellow 6G pdr.—IG	50
Vat yellow 6 GD pdr.—IG	50
Vat yellow brown 3 G paste—IG	500
Mordant and Chrome Dyes	
Acid alizarin gray G pdr.—M	498
Acid anthracene brown PG—By	1,941
Acid anthracene brown PG—IG	
Acid anthracene red 5RL—By	100
Anthracene chromate brown EB—IG	1,000
Brilliant chrome violet 3RN—DH	220
Chromazurine DN—DH	110
Chrome gray III—DH	11
Chrome printing orange 3R—I	128
Chrome printing red Y—DH	441
Chromocitronine 3 R—DH	220
Chromoxane pure blue B—By	331
Chromoxane violet 5B—By	100
Eriochrome brilliant violet B supra—G	661
Eriochrome red G—G	1,102
Eriochrome yellow G paste—G	2,899
Metachrome blue black 2 BX—IG	2,441
Metachrome brilliant blue BL—IG	200
Metachrome red G—IG	200
Metachrome violet 2R—IG	400
Modern gray CVX—DH	110
Direct Dyes	
Benzo fast black L—IG	1,000
Benzo fast blue G—IG	474
Benzo fast blue 4GL—By	500
Benzo fast Bordeaux 6BL—By	525
Benzo fast brown GL—By	200
Benzo fast brown 3GL—IG	1,350
Benzo fast brown RL—IG	100
Benzo fast gray BL—IG	1,007
Benzo fast heliotrope 5RH—By	200
Benzo rhoduline red B—By	100
Brilliant benzo green B—IG	500
Brilliant pure yellow 6 G extra—By	220
Chicago red III—G	1,102
Chlorantine fast Bordeaux 2BL—I	661
Chlorantine fast gray B—I	1,763
Chlorantine fast green B—L	1,102
Chlorantine fast orange 2 RL—I	220
Columbia catechine G—IG	500
Diamine steel blue L—IG	50
Diamine fast brown GB—IG	500
Diamine fast brown GHB—IG	500
Diamine fast orange EG—IG	500
Diamine fast orange ER—IG	500
Diaminogene blue GG—C	443
Diazine black G—IG	50
Diazo brilliant blue 2BL extra—By	100
Diazo brilliant green 3G—By	551
Diazo brilliant orange 5G—By	500
Diazo brilliant scarlet B extra—By	441
Diazo brilliant scarlet—By	882
Diazo brilliant scarlet S4B—By	99
Diazo brown BW—I	110
Diazo sky blue 3GL—By	1,073
Diazophenyl black V—G	2,205
Diphenyl fast bronze B—G	2,205
Diphenyl fast brown GNC—G	2,205
Fast cotton brown 4RL—IG	200
Fast cotton gray, BL, VL—IG	550
Fast cotton rubine B—IG	100
Formal fast black G conc.—G	330
Half-wool blue 3R—IG	1,000
New Bordeaux RX—IG	50
Paper red A extra—IG	500
Para brilliant orange G—IG	250
Para brown GK—IG	600
Para brown RK—IG	550
Pluto brown GG—IG	100
Rosanthrene fast red 7BL—I	220
Rosanthrene orange R—I	441
Sky blue N—I	200
Trisulphon bronze BG conc.—S	200
Dyes for Artificial Silk	
Artificial silk black R—IG	200
Azonine direct blue B paste—IG	200
Cellit fast red B—IG	50
Dispersol yellow 3G paste—BD	116
Duranol blue G paste—BD	116
Duranol orange G paste—BD	232
Duranol red G paste—BD	212
Pink R extra—IG	50
Setacyl direct blue G pdr.—G	220
Rapid Fast Dyes	
Rapid fast orange RG paste—By	200
Rapid fast red GL paste—IG	1,000
Rapid fast red GZ paste—IG	600
Basic Dyes	
Acridine scarlet J—DH	55
Brilliant acridine orange 3R—DH	220
Brilliant rhoduline Blue R—IG	500
Rhodamine 6 GDN extra (SS)—B	10,715
Sulfur Dyes	
Cross dye green B—BD	19,446
Indocarbon SN—IG	200
Thional brilliant green G G conc—S	2,000
Thionol yellow GR—BD	1,775
Color Lake Dyes	
Fast lake yellow G pdr.—Q	220
Hansa yellow G pdr.—IG	1,000
Helio Bordeaux BL pdr—By	510
Helio red RMT extra pdr.—IG	200
Paper fast Bordeaux B—IG	500
Unclassified Dyes	
Cibacete navy blue 3R pdr.—I	486
Cibacete orange 3G pdr.—I	132
Cibacete scarlet G pdr.—I	22
Cibacete yellow 2R pdr.—I	44
Luxine orange R—DH	11
Polytrope orange 2R—DH	11
Solan printing brown 3R—IG	50
All other dyes	13

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Name of Lake	Pounds
Azure blue pdr.	250
Geranium lake	22
Madder lake VN pdr.	600
Madder rose	110
Permanent yellow G pdr.	25
Solferino lake	11
Toner black pdr.	1,102
Viridine lake pdr.	600

GERMANY'S CHEMICAL COLOSSUS

(Continued from page 435)

The stockholders were asked to be content with this announcement, as further details cannot, for obvious reasons be made public. The I. G., with some shrewd acquisitions of control over processes, has concentrated practically all the inventions and processes dealing with the distillation of coal and the production of motor fuels in the hands of a staff of chemists and engineers such as, it is claimed, no other chemical undertaking in the world has at its disposal. It is, therefore, not surprising, that experiments in the cheaper production of methanol and in correcting the "knocking" tendencies of benzene distilled through coal and of benzol mixtures have made progress in recent months, justifying precautionary marketing arrangements. In the Deutsche Gasolin the I. G. is stated to have a half-interest, the Standard Oil Co. 25 per cent, and Shell 25 per cent. There is talk, according to the "Chemical Age" (London), of a neutral foreign holding company being formed; so far this report has been neither denied nor confirmed. With the new plant, it is estimated that within two years an annual output of 250,000 to 300,000 tons of synthetic motor fuel will be possible. It is not clear whether this estimate refers only to "Motalin" (motor fuel treated with iron carbonyl), to improvements understood to have been achieved in the production of methanol, or whether to methanol in a mixture treated with some "anti-knock."

GERMAN consumption of motor fuel in 1925 was 600,000 tons, and it is thought will be 1,000,000 tons in two years. Accordingly the time when Germany could supply her own needs with synthetic fuel and think of exporting, still seems a little distant. Nevertheless, prospects of eventual competition opened up by "Motalin" in the market have probably brought the big rival oil concerns together into partnership with the German Dye Trust. Another consideration is the interest that foreign users may be expected to evince for a new "anti-knock" agency and indeed for all synthetic processes, as the necessity of eventual reliance upon coal distillation for automobile fuel is recognized. The electrochemical utilization of coal leads, via the production of calcium carbide, to the production of cyanamide, acetic acid, and ethyl alcohol. The production of acetic acid at four I. G. plants already seriously threatens the production from wood. In regard to the production of synthetic methanol it is difficult to ascertain the real facts. On the one hand, Badische made a statement some little time ago calculated to prevent undue optimism. On the other, it seems that a large new works is being erected, with a capacity up to 1,000 tons of methanol per day.

The I. G. has connections with the Bergius Evag Co., and the Steinkohlen-Bergen A.-G., operating the "berginisation" of coal. In the main, the I. G. production of oil fuels is concentrated in two directions; the reduction of carbon monoxide, with hydrogen, to methane, and methanol and other alcohols, and the liquefaction and hydrogenation of coal. By the first method butyl alcohol may be obtained. This finds growing application as a solvent, and Hoechst is entering on a large scale into lacquer manufacture, using I. G. solvents, I. G. cellulose, I. G. dyes.

Phosphate Fertilizers

Obviously, these fuel plans are many of them made for far future fruition and the chemical fibres, while more imminent, are still in the development stage (this is especially so of synthetic wools about which there are persistent rumors). But fertilizers are already a definite factor in the profits of the I. G., and it is noteworthy that there are new developments in this field as well. The Trust has extended its operations to phosphates, and is now working the State Piesteritz plant. At present Germany has about 60 superphosphate works, almost all connected with the German Superphosphate Industry Co., which regulates the domestic sales.

At the Piesteritz works, says the "Frankfurter Zeitung," the I. G. and the Bavarian Stickstoff Werke propose to produce phosphorus by electrical means. The works, situated on the Elbe, near Wittenberg, and belonging to a State (Reich) Company—the Mitteldeutsche Stickstoff Werke—has recently been leased for a long term to the Bavarian Stickstoff Werke on payment of a rental, so that the Reich company, which has hitherto been unremunerative, will now be able to pay a dividend.

It has been found possible so to improve the production method at the Piesteritz works that a much smaller number of kilowatt-hours is now necessary for turning out the same quantity of cyanamide, and it is said, that half the plant can now produce as much as was previously made in the whole of the works, that is 30,000 tons of nitrogen, or about 145,000 tons of cyanamide.

In the meantime at the Bavarian Stickstoff plant small experimental furnaces have been erected for working up foreign phosphate into phosphorus or phosphoric acid. The results of these experiments, with the economy realized in electricity consumed in cyanamide production, have advanced the scheme for a decisive reconstruction of a part of the carbide furnaces and other equipment at the Piesteritz works. Half the plant is being transformed for the production of phosphorus by the use of the electricity from the Golpa-Zschornewitz peat fuel generating station.

The Bavarian Stickstoff Werke and the Badische group will jointly undertake the technical execution and financing of the new manufacture of phosphoric acid, there being available 250,000,000 kilowatt-hours annually. The result of the reconstruction already in hand will be a considerably increased production of phosphorus in Germany, foreign phosphate naturally forming the raw material. Arrangements are already foreseen for utilization of the phosphorus at the Leuna works by the conversion of phosphoric acid with various ammonia compounds into an ammonia-phosphate fertilizer. The product in question is already being made in moderate quantities at the existing works of the I. G., and has been on the market for a short time past. The production of such a phosphate fertilizer will now be considerably increased, the increase being estimated at 150,000 tons.

From Caustic Soda to Rubies

Neither free sulfur nor pyrites are found within German territory and with a heavy sulfuric acid demand, it is but natural that the Leverkusen branch of the I. G. has long worked on the problem of reducing gypsum (with some form of carbon), to convert the sulfur dioxide which could be produced to sulfuric acid, while the residual calcium compound could be utilized as cement. Very large amounts of gypsum are required by the I. G. for the conversion of ammonia to ammonium sulfate, lime being also obtained. On this account the Trust has acquired large gypsum deposits.

The production of lithopone is now being carried on at Leverkusen. In conjunction with the Metallbank, of Frankfurt, which controls the Gewerkschaft Sachtleben, the I. G. controls more than half of the German production of mineral pigments and dry colors. Badische and another branch prepare synthetic resins and kindred products. Great importance is attached to the production of synthetic tanning materials (in which Badische

is interested), as this branch may again relieve Germany of the necessity of imports. Kalle are manufacturing celophane. The I. G. is also producing photographic tracing paper by a new method. At the Griesheim Bitterfeld factory are manufactured electrolytic caustic soda and chlorine; graphite (by an electrical method); various artificial abrasives; synthetic rubies, sapphires, and other artificial precious stones (the Deutsche Edelstein Gesellschaft—precious stone company—is under I. G. control). The Griesheim company also manufactures carbon disulfide by electrochemical means. Apart from the above-named electrochemical products the I. G. also manufactures, at three or four factories, calcium carbide, from which the Wackur A.-G. prepares paraldehyde, aldehyde-shellac, copal substitute, acetic acid, alcohol, tetrachloro-ethane, chloroform, tri- to hexachloroethylene, acetone and related products.

As regards production of gases, the I. G. has at least a partial control of this German industry, through the Griesheim-Elektron company, which has large interests in the Lindes Eismaschinen and the Deutsche Oxyhydric. Nitrogen is produced from air by the Linde method at the Leuna and Oppau works on a very large scale. The use of oxygen (also produced in the same process), has largely increasing owing to its application in welding methods in the iron industries (e. g., oxy-acetylene welding, etc.).

All of these developments, with their expanding combination of plants and concentration of both producing and consuming plants, are over and above and beyond the dye and medicinal activities upon which they were founded.

[*New Incorporations*]

Art Stucco Products, New York, paints, stucco; $50,000; E. W. Poindexter, J. D. Carroll, M. C. Caldridge.

Wilmington Enameling Co., Wilmington, Delaware; leather, $100,000.

Continental Refining Co., New York; $20,000; D. Cohen, O. Tanenbaum, M. Gelber.

Richards, Terwilliger, New York; textiles, $10,000; J. C. Richards, Jr., R. Terwilliger, M. I. Oivigne.

New Brunswick Glass Co., Inc.; New Brunswick, N. J., $125,000; Wm. Teitelbaum, Wm. Goldsburger, Ben L. Krieger.

Urbain Gasoline Co., Inc., of New York City, Dover, Delaware; petroleum products; $12,500,000.

A W. F. Laboratories, New York; chemicals; $18,000; E. H. Franken; W. Meyer, F. Maltz.

Iwas, Wilmington, Delaware; chemicals; $1,000,000.

La Salle Industrial Chemical Co., Queens, N. Y., $15,000; P. Abrams, S. E. Vreeland, S. Stimmel.

Wolf Cocek Petroleum Co., Wilmington, Delaware, $200,000.

Kaweah Petroleum Corp., Wilmington, Delaware, mineral, $50,000.

Universal Cork & Swab Corp., Jersey City, N. J., $100,000; manufacture cork products; Joseph M. Alsofrom, Richard J. Nagle, Joseph M. Alsofrom.

Hiram Tyree Products Corp., Wilmington, Delaware; $1,000,000; manufacture chemical preparations.

Harpaula, New York, chemicals, 200 common, no par; C. V. Opper, M. D. Purdy, W. R. Bogert.

Triangle Waxed Products Co., Inc., Newark, N J.; manufacture of waxed products; $100,000; Emil Miller, Norman Leibowitch, Charles Williams.

Roundtree Cotton Mills, Wilmington, Delaware; $3,000,000 manufacture textiles.

Denewco Corp., New York; make chemicals; 2,000 shares, $100 each; 1,000 common, no par H. D. M. Connick, W. W. Newberry.

Saratoga Springs Natural Carbonic Co., Schenectady, N. Y. make carbonic acid gas; $10.000, T. C. and H. D. Brown, J. E. Lowe.

American Rubber Corp., Dover, Delaware; manufacture, $1,000,000.

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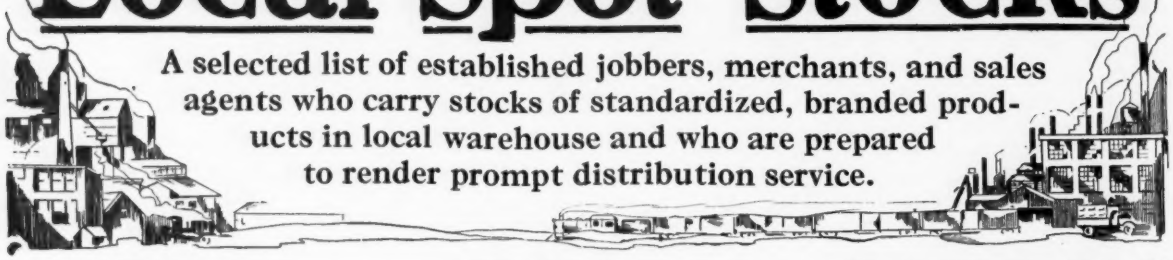

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PARTNER WANTED—active, with $25,000 to assist in organizing Clay Pulverizing company. Highest grade White Colloidal Clay deposit located on railroad in South. Permanent, profitable carload business with manufacturers rubber, paint, paper, porcelain, etc. Box 534, CHEMICAL MARKETS.

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PLANT FOR SALE—Practically new plant available for paint, chemical or similar purposes; an acre and a half of ground; railroad siding; new concrete fireproof buildings, piped and wired. 7,000 square feet for sale or for rent in the Metropolitan district. Favorable terms for quick action. Address Receiver, Box 487, CHEMICAL MARKETS.

FOR SALE—Complete files of DRUG & CHEMICAL MARKETS, unbound, $5.00 a volume.

SOUTH AMERICA—Old established house with branches on the east coast and experienced men covering Brazil and Argentina desires connection with highly reputable American manufacturers of industrial chemicals of all kinds for sale in these countries. Highest references exchanged. Box 488, CHEMICAL MARKETS.

SOAP FACTORY FOR SALE—On account of death of partner will sell soap business and annual sales of $400,000. Have two established brands of household soap capable of national development. Financial condition and trade reputation will bare strictest scrutiny. No brokers. Box 489, CHEMICAL MARKETS.

FERTILIZER direct to farmer mixing plant, near Pennsylvania-Maryland line, has interesting proposition for party with capital. Box 521, CHEMICAL MARKETS.

ASSISTANT SALES MANAGER—Young man wanted with knowledge of office routine and ability as office correspondent to assist sales manager. Knowledge of the chemical line desirable, but not essential. Position has future with large organization. Kindly give full particulars as to training and experience. Box 491, CHEMICAL MARKETS.

WE DESIRE connection with manufacturer and packer of high grade common salt. Kindly address the Chemical Sales Co., 272 Jackson St., St. Paul, Minn.

IF YOU are about to introduce your product into a new consuming industry, we can show you how to do it quickly and at minimum cost. We have done it for others on products you would recognize immediately. An interview would soon reveal whether we could be similarly helpful to you. Write us Box 537, CHEMICAL MARKETS.

Situation Wanted

RUBBER CHEMIST desires position where the knowledge of compounding, chemical and physical testing of rubber could be used to advantage. Box 524, CHEMICAL MARKETS.

PERFUMER AND SOAPMAKER, expert, sixteen years practical experience and broad chemical knowledge wants to connect with reliable firm. Box 525, CHEMICAL MARKETS.

CHEMIST—Thirty-one, married, research or operating, experienced in sulfur dyes and intermediates is open for an immediate engagement in this or any other chemical line. Location New York or vicinity. Box 522, CHEMICAL MARKETS.

SECRETARY STENOGRAPHER, knowledge bookkeeping—young lady, seven years' experience drug and chemical house, dependable, executive ability, well educated, references. Salary $35. Box 529, CHEMICAL MARKETS.

COLLEGE INSTRUCTOR, twenty-four, chemical and business training, desires position industrially in sales, control or research department. Single, capable and ambitious. Box 530, CHEMICAL MARKETS.

CHEMICAL ENGINEER—twenty-six, married, six years experience desires permanent position with food products or other chemical concern vicinity New York. Box 536, CHEMICAL MARKETS.

CHEMICAL ENGINEER—eight years' manufacturing experience, eight years' selling experience, chemicals, chemical machinery, wants position Plant Manager, Sales Engineer. Age 38. Box 533, CHEMICAL MARKETS.

Help Wanted

A PAPER manufacturing company desires to employ a practical chemist. Box 532, CHEMICAL MARKETS.

LABORATORY CHEMIST wanted in testing and matching laboratory of large dyestuff dealer. Location, Boston. Salary, $1,800 to start. Must be an experienced, quick workman. Write fully as to technical training, practical experience and give references in first letter. Box 484, CHEMICAL MARKETS.

SALESMAN wanted to handle sizing materials to the paper industry. Drawing account and commission. Exclusive territories. Opportunity to join established, aggressive organization. Box 485, CHEMICAL MARKETS.

LACQUERS—Chemist able to handle actual plant operations wanted by established firm. Must be capable, technical and have strong personality. Opportunity for the right man. Box 549, CHEMICAL MARKETS.

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BAIRD & McGUIRE, Inc.
Holbrook, Massachusetts

Help Wanted

LABORATORY ASSISTANT — Young man wanted as assistant in large industrial chemical manufacturer's plant. Laboratory testing and analytical work principally, with opportunity to assist in research problems. Salary $1,800. Full particulars in application. Box 504, CHEMICAL MARKETS.

RUBBER CHEMIST—Manufacturer requires service of technical man with practical plant experience. Box 505, CHEMICAL MARKETS.

SHIPPING CLERK familiar with packing of chemical products wanted to take charge of warehouse in Brooklyn. Box 506, CHEMICAL MARKETS.

SODA ASH—115 barrels offered for resale by manufacturer. No brokers or agents. Well known brand in good condition. Will be delivered in Metropolitan district by our own truck. What bids? Box 507, CHEMICAL MARKETS.

SUPERINTENDENT wanted for heavy chemical factory in Middle West. Man must be thoroughly experienced in handling labor, including shipping, packing, etc. Please write complete experience and supply references. Confidential. Box 500, CHEMICAL MARKETS.

SALESMAN—Exceptional opportunity for a live progressive man in a growing chemical department. Location Chicago. Must not be over 35 years old. We require a producer with a successful record and will give him every chance for rapid advancement. Box 501, CHEMICAL MARKETS.

SALESMAN calling on manufacturers of chemicals, drug, dyes, colors, food products in Pennsylvania, New York, New Jersey or New England for attractive side line; commission basis. Established business. State age, reference, line carried and territory covered. Manufacturer Box 518, CHEMICAL MARKETS.

BOOKKEEPER:—One capable of keeping entire set of books. Familiar with Paint Trade, Raw Materials, and Chemicals. Female preferred. State age, experience and salary expected. Box 446, CHEMICAL MARKETS.

SALESMAN WANTED in the East and Middle West for successful by-product (specialty non-competitive) used in the soap industry. Must be thoroughly acquainted in this field. Good future. Write full particulars as to experience, etc. Box 538, CHEMICAL MARKETS.

Miscellaneous

FOR SALE—Several 1,000 kg Accidum Succini (Bernsteinsaure) to be sold. Amber Varnish Works founded 1861. Address: Ed. Pfannenschmidt A-G, Danzig-Schellmuhl, Germany.

THE undersigned desires to make connections with American manufacturers of Aniline Oil for the sale of their product in this territory. Address: Societe de Commission, Tcheco-Roumaine, Boulevard Maria 1, Bucarest, Roumania.

LIMESTONE available for quarrying on a royalty basis. Large, high-grade deposit of Annville limestone adjacent to main line tracks of the Reading Railroad System. Particularly adaptable for use in fluxing and cement manufacturing. Pennsylvania State Geological survey shows tests of 95-98% Calcium Chloride. Firms interested in this proposition should communicate with D. M. Stoudt, Rosecoyd Farm, Hershey, Pa.

FOR SALE—Nitric Acid. Surplus stock of 30 tons packed in 400 new carboys. Will sell below market. Box 477, CHEMICAL MARKETS.

ROSIN—The undersigned desires to get in touch with first hand producers of rosin in a position to assume a large export business for sales through our exceptional facilities in central and southeastern Europe, provided they are able to meet foreign competition in this field both as to quality and price. Address Technisch-Chemische Handelsgesellschaft, m. b. H., Wien 1, Fleischmarkt 1, Vienna, Austria.

Plant Equipment

WANTED—Several glass lined or monel metal tanks in good condition; capacity 40 to 100 gallons. Box 514, CHEMICAL MARKETS.

WANTED—Round glass-lined steel tank, at least 30 gallons capacity. Box 492, CHEMICAL MARKETS.

FOR SALE—Quantity of French filter paper below current market quotations. Excess stock of manufacturer curtailing lines. Box 493, CHEMICAL MARKETS.

FOR SALE—High grade chemical laboratory balance and microscope. Complete outfit with all atttchments. Box 194, CHEMICAL MARKETS.

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Buyers Guide

ACIDS

Coal-Tar

American-British Chemical Supplies, Inc.
Baird & McGuire, Inc.
Barrett Co.
Calco Chemical Co.
Cooper & Nephews, Wm.
Du Pont de Nemours & Co., E. I.
Greeff & Co., R. W.
Hydrocarbon Prods. Co.
Innis, Speiden & Co.
Jordan & Bro., Wm. E.
Monsanto Chemical Works
Roessler & Hasslacher Chemical Co.
Tar Acid Refining Corp.

Organic

American Cyanamid Co.
Cleveland-Cliffs Iron Co.
Cooper & Co., Charles
Du Pont de Nemours & Co., E. I.
Eastman Kodak Co.
Fergusson, Jr., Alex C.
General Chemical Co.
Grasselli Chemical Co.
Gray & Co., William S.
Greeff & Co., R. W.
Heyden Chemical Corp.
Innis, Speiden & Co.,
Mallinckrodt Chemical Works
Monsanto Chemical Works
Roessler & Hasslacher Chemical Co.
Seaboard Chemical Co.
Victor Chemical Works

Mineral

American Cyanamid Co.
Cleveland-Cliffs Iron Co.
Cooper & Co., Charles
Du Pont de Nemours & Co., E. I.
General Chemical Co.
Grasselli Chemical Co.
Heyden Chemical Corp.
Monsanto Chemical Works
Pennsylvania Salt Manufacturing Co.

ALCOHOL

Denatured

American Solvents & Chemical Corp.
Berg Industrial Alcohol Co., David
Commercial Solvents Corp.
Cooper & Co., Charles
Federal Products Co.
Gray & Co., William S.
Industrial Chemical Co.
Lowry & Co., Inc.
Miner-Edgar Co.
Roessler & Hasslacher Chemical Co.
Seaboard Chemical Co.
U. S. Industrial Alcohol Co.

Methanol

Cleevland-Cliffs Iron Co.
Cooper & Co., Charles
Du Pont de Nemours & Co., E. I.
Eastman Kodak Co.
Gray & Co., William S.
Greeff & Co., R. W
Industrial Chemical Co.
Miner-Edgar Co.
Roessler & Hasslacher Chemical Co.
Seaboard Chemical Co.

ALKALIES

Arnold, Hoffman & Co.
Church & Dwight
Dow Chemical Co.
Electro Bleaching Gas Co.
W. F. George Chemicals Inc.
Grasselli Chemical Co.
Innis, Speiden & Co.
Mathieson Alkali Works
Michigan Alkali Co.
Niagara Alkali Co.
Pennsylvania Salt Manufacturing Co.
Roessler & Hasslacher Chemical Co.
Solvay Process Co.
Warner Chemical Co.
Winkler & Bros. Co., Isaac.

ALUMS

Cooper & Co., Charles
Du Pont de Nemours & Co., E. I.
Fergusson, Jr., Alex. C.
General Chemical Co.
W. F. George Chemicals Inc.
Grasselli Chemical Co.
Greeff & Co., R. W.
Innis, Speiden & Co.
Monsanto Chemical Works
Pennsylvania Salt Co.
Roessler & Hasslacher Chemical Co.

AMMONIA & SALTS

Barrett Co.
Benkart & Co., W.
Cooper & Co., Charles
Dow Chemical Co.
Fergusson, Jr., Alex. C.
General Chemical Co.
Grasselli Chemical Co.
W. F. George Chemicals Inc.
Greeff & Co. R. W.
Innis, Speiden & Co.
Mallinckrodt Chemical Works
Mathieson Alkali Works
Roessler & Hasslacher Chemical Co.

DYE & TAN STUFFS

American-British Chemical Supplies, Inc.
Arnold, Hoffman & Co.
Calco Chemical Co.
Du Pont de Nemours & Co., E. I.
General Dyestuff Corp.
W. F. George Chemicals Inc.
Monsanto Chemical Works
Mutual Chem. Co.
National Aniline & Chemical Co.
Newport Chemical Works
Seaboard Chemical Co.
Starkweather Co., J. U.

FILLERS & CLAYS

American-British Chemical Supplies, Inc.
Arnold, Hoffman & Co.
Fergusson, Jr., Alex. C.,
Hammill & Gillespie
Innis, Speiden & Co.
Miner-Edgar Co.
Roessler & Hasslacher Chemical Co.
Wishnick-Tumpeer Chemical Co.

PIGMENTS & COLORS

Cabot, Godfrey L.
Calco Chemical Co.
Cooper & Co., Charles
Du Pont de Nemours & Co., E. I.
Fergusson, Jr., Alex C.
General Dyestuff Corp.
Industrial Chemical Co.
Innis, Speiden & Co.,
King & Co., E. & F.
National Aniline & Chemical Co.
Newport Chemical Works
Wishnick-Tumpeer Chemical Co.

ACCELERATORS

American Cyanamid Co.
Cleveland-Cliffs Iron Co.
Dovan Chemical Corp.
Dow Chemical Co.
Du Pont de Nemours & Co. E. I.
Gray & Co., William S.
Grasselli Chemical Co.
Greeff & Co., R. W.
National Aniline & Chemical Co.
Roessler & Hasslacher Chemical Co.

FERTILIZER SUPPLIES

American Cyanamid Co.
Barrett Co.
Cooper & Co., Charles
Du Pont de Nemours & Co., E. I.
Eaton Clark Co.
Fergusson, Jr, Alex. C.
General Chemical Co.
Greeff & Co., R. W.
Heide & Co.
Innis, Speiden & Co.
Peebles, D. Meade
Roessler & Hasslacher Chemical Co.

INSECTICIDES

Dow Chemical Co.
General Chemical Co
Grasselli Chemical Co.
Greeff & Co., R. W.
Jordan & Bros., Wm. E.
Monsanto Chemical Works
Roessler & Hasslacher Chemical Co.

INDUSTRIAL CHEMICALS

American-British Chemical Supplies, Inc.
American Cyanamid Co.
American Solvents & Chemical Corp.
American Trona Corp. (borax)
Arnold Hoffman Co.
Baird & McGuire, (creosols)
Barlow, Joe
The Barrett Co.
Benner Chemical Co.
Godfrey L. Cabot (carbon blk.)
Carbide & Carbon Chemical Corp.
Carus Chemical Co.
Chemical Utilities Co.
Church & Dwight (soda bicarb.)
Chemische Fabrik (Dr. Hugo Stoltzenberg)
Cleveland-Cliffs Iron Co. (wood chem.)
Commercial Solvents Corp. (butanol)
Charles Cooper & Co.
Leonard W. Cronkhite, Inc.
Croton Chemical Corp.
Doe & Ingalls
Dovan Chemical Co (rubber accel.)
Dow Chemical Co.
E. I. Du Pont de Nemours & Co.
Emery Candle Co.
Electro Bleaching Gas Co. (chlorine)
Alex. C. Fergusson, Jr.
General Chemical Co.
W. F. George Chemicals, Inc.
Grasselli Chemical Co.
William S. Gray & Co. (wood chem)
R. W. Greeff & Co.
Howe & French
Hydrocarbon Products Co.
Industrial Chemical Co.
Innis Speiden & Co., Inc.
International Salt Co.
E. & F. King & Co.
George Mann & Co.
Mathieson Alkali Works
Merchants Chemical Co.
Michigan Alkali Co.
Miner-Edgar Co. (wood chem.)
Monsanto Chemical Works
Mutual Chemical Co. (bichromates)
Niagara Alkali Co.
Pacific Coast Borax Co.
Parsons & Petit (sulfur)
Pennsylvania Salt Manufacturing Co.
Pierce & Stevens,
G. S. Robins & Co.
Rodgers Chemical Co.
Roessler & Hasslacher Chemical Co.
Seaboard Chemical Co. (wood chemicals)
Selden Co.
Solvay Process Co. (alkalies)
J. U. Starkweather Co.
G. A. Steffens
Thompson, Hayward Chemical Co.
Victor Chemical Works
Warner Chemical Co.,
John C. Wiarda & Co.,
Isaac Winkler & Bros., Company, (alkalies)
Wishnick-Tumpeer Chemical Co.

SOLVENTS

American-British Chemical Supplies Inc.
American Solvents & Chemical Corporation
Barrett Co.
Berg Industrial Alcohol Co., David
Commercial Solvents Corp.
Cooper & Co., Charles
Dalgger & Co., A.
Doe & Ingalls
Atkins & Co. E.
Dow Chemical Co.
Du Pont de Nemours & Co., E. I.
Eastman Kodak Co.
Eaton Clark Co.
Fergusson, Jr., Alex C.
General Chemical Co.
Grasselli Chemical Co.
Gray & Co., William S.
Greeff & Co., R. W.
Industrial Chemical Co.
Innis, Speiden & Co.
King & Co., E. & F.
Miner-Edgar Co.
Newport Chemical Works
Roessler & Hasslacher Chemical Co.
Seaboard Chemical Co.
Ube, George
U. S. Industrial Alcohol Co.
U. S. Industrial Chemical Co.
Warner Chemical Co.
Wishnick-Tumpeer Chemical Co.

COAL-TAR, CRUDES & INTERMEDIATES

American-British Chemical Supplies, Inc.
Baird & McGuire, Inc.
Barrett Co.
Cooper & Nephews, Wm
Calco Chemical Co.
Du Pont de Nemours & Co. E. I.
General Dyestuff Corp.
Grasselli Chemical Co.
Gray & Co, William S.
Hydrocarbon Products Co.
Jordan & Bros., Wm. E.
Monsanto Chemical Works
National Aniline & Chemical Co.
Newport Chemical Works
Tar Acid Corp.
Wishnick-Tumpeer Chemical Co.

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Bicarbonate of Soda

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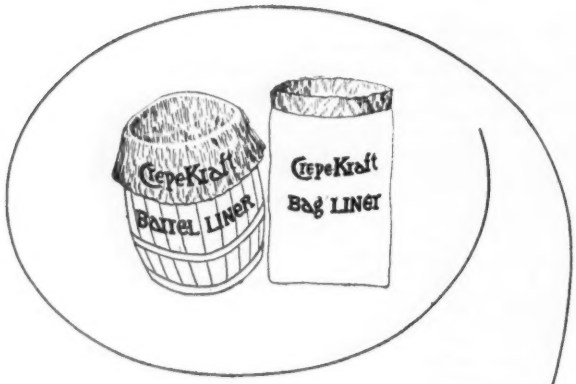

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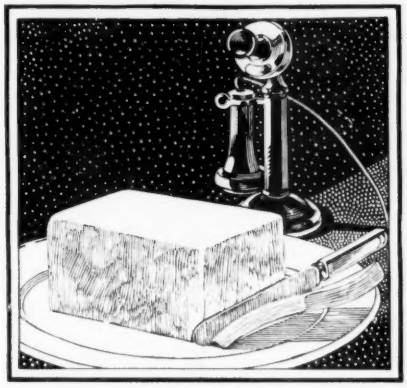
Isaac Winkler & Bro. Co. 465
1st Natl. Bank Bldg., Cincinnati, O.
Wishnick-Tumpeer Chemical Co. 391
130 - 44th St., Brooklyn, N. Y.

Business slumped
Then LONG DISTANCE *sold*
$67,000
WORTH OF BUTTER



THE BUTTER market was in that condition dreaded in every business. Orders had fallen off. Hardly a buyer could be found who would purchase outright; the most that was offered was to take the product on consignment. Then it was that a St. Louis wholesale house turned to the telephone. Their answer to the slump was a well-planned campaign of long distance calls, and this one telephone drive sold *outright* sixty-seven thousand dollars' worth of butter!

"WE WISH to thank your representative for his aggressiveness," writes this St. Louis concern. "He talked selling by Long Distance until we were convinced."

There is no more effective answer to slumping business than a campaign of long distance calls. They enable you to concentrate weeks of travel into days of intensive, effective work. Your campaign can be transferred at will, and almost instantly, from one trade territory to any other in any part of the country. Long distance solicitations restore confidence and make good-will. They find what you want to buy. They make sales. They do all the most persuasive human voice can do, and add to it country-wide range. Do you know from experience how your sales may be speeded up, how slumps may be prevented in advance by telephone? Have your important men been trained in the essentials of telephone selling and buying? If business should slow down, do you know how long it would take to establish telephone contact with your important customers in every state in the Union?

The Commercial Department of the local Bell company will gladly make a free study of the productive telephone opportunities in your business. In the meantime, the telephone instrument on your desk will connect you promptly with anyone wanted in 70,000 towns and cities. What distant concern or executive would it be to your profit to talk to, now? . . . . . *Number, please?*

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EQUITABLE CONSIDERATION IS DUE IN BUSINESS ALIKE TO CAPITAL, MANAGEMENT, EMPLOYEES, AND THE PUBLIC.*

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REG. U.S. PAT. OFF.
CHEMICALS AND SERVICE

*{No. 3. A series based on the conception of the U. S. Chamber of Commerce "Principles of Business Conduct". Reprinted in the interest of keeping American business on a sound and wholesome basis.}

To make our point clear let us consider business as a rope which supports the weight of the world's industry. Each strand of this rope must bear its portion of stress and strain; that all may do so none can be denied its share of consideration.

This understanding and observance of the balances of business have enabled R & H to serve you successfully for over forty years. They have enabled R & H to deliver chemicals of the highest quality, backed by service colored by your interests.

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